JUBBULPORE.



Bemrose, Collo., Derby.

THE MONKEY'S LEAP, MARBLE ROCKS.

CENTRAL PROVINCES

DISTRICT GAZETTEERS

JUBBULPORE DISTRICT

VOLUME A.

DESCRIPTIVE

EDITED BY A. E. NELSON, I.C.S.

BOMBAY:
PRINTED AT THE TIMES PRESS.

1909

PREFATORY NOTE.

THE extant Settlement Reports on the Jubbulpore District are those of Mr. A. M. Russell (1869) and Khān Bahādur Aulād Husain, C.I.E. (1895). Mr. H. R. Crosthwaite is at present settling the District, and some of his preliminary reports have been consulted with advantage. Mr. Crosthwaite has written the Chapters on Agriculture and Land Revenue, and has contributed largely to Chapters I and V. He has also read the whole book through in proof, contributing much useful criticism and I am greatly indebted to him for sparing so much of his valuable time for the purpose of this volume. A free use has been made of some manuscript notes on various social subjects collected by Colonel Sutherland, I.M.S. The articles on Geology and Minerals have been written by Mr. L. L. Fermor of the Geological Survey; that on Wild Animals has been compiled from notes supplied by Mr. A. L. Chatterji, E.A.C. of Forests, most of the description being taken from Mr. A. A. Dunbar-Brander's excellent monograph, and the section on birds being from the pen of Lt.-Col. Nurse, 33rd Punjabis; Mr. R. S. Hole, I.F.S., has contributed the article on Botany and Mr. A. L. Chatterji that on Forests; Lt.-Col. Quayle has supplied the note on Diseases; a note on Village Life has been sent in by Mr. C. J. Irwin, I.C.S., and another on the Material Condition of the People by Mr. A. E. Mathias, I.C.S. Mr. A. Brooke-Meares has described the Criminal classes of the District and Mr. H. F. Hallifax, I.C.S., its Crime and Litigation; Mr. W. H. Todd, P. W. D., has contributed a note on Irrigation and Mr. H. B. Learoyd the section on Communications. Mr. F. G. Plymen has supplied the scientific account of the Soils of the District and Mr. G. Evans has given some valuable information about the Crops. Chapter IX has been written by Sir Arthur Blennerhassett, Bart., Deputy Commissioner, who has been most assiduous in supplying me with contributions from his staff. Of the latter, notes on

Leading Families were compiled by Mr. N. R. Bhat, E.A.C., on tahsils and villages in the Sihorā and Murwāra tahsils by Mr. R.B. Sheore, E.A.C., and on tahsīl and villages in the Jubbulpore tahsīl by Mr. Mian Bhai, E.A.C. The article on Jubbulpore city has been contributed by Mr. G. A. H. Searle, I.C.S. Mr. Hīra Lāl has, as usual, supplied valuable notes on History, Archæology and Language.

NAGPUR,

4th March 1909.

A. E. N.

JUBBULPORE DISTRICT GAZETTEER.

CONTENTS.

CHAPTER V.—LOANS, PRICES, WAGES, MANUFACTURES, TRADE AND COMMUNICATIONS.

CHAPTER VI.—FORESTS AND MINERALS.

APPENDIX.

LIST OF MAPS AND PHOTOGRAPHS.

PARAGRAPH INDEX.

CHAPTER I.—GENERAL DESCRIPTION.

CHAPTER II.—HISTORY AND ARCHÆOLOGY.

Archæology—

CHAPTER III.—POPULATION.

Statistics of Population—

Chapter IV.—AGRICULTURE.

CHAPTER V—LOANS, PRICES, WAGES, MANUFACTURES, TRADE, AND COMMUNICATIONS.

CHAPTER VI.—FORESTS AND MINERALS.

Minerals—

CHAPTER VII.—FAMINE.

CHAPTER VIII.—LAND REVENUE ADMINISTRATION.

CHAPTER IX.—GENERAL ADMINISTRATION.

APPENDIX.—GAZETTEER OF TAHSILS, TOWNS, IMPORTANT VILLAGES, RIVERS AND HILLS.

Names of Places—

List of the Deputy Commissioners who have held charge of the Jubbulpore District since its constitution, with the dates of their periods of office.

Name of Deputy Commissioner.	Period.	
	From	To
1. E. W. Cockerell, Esq.	1819	1820
2. L. Davis, Esq.	1821	
3. Lieut. Wardlow	1821	
4. E. W. Cockerell, Esq.	1822	June 1824
5. Charles Fraser, Esq.	June 1824	Feb. 1828
6. Captain W. H. Sleeman... ...	March 1828	Nov. 1830
7. R. Longman, Esq.	Dec. 1830	April 1831
8. Captain R. Low	16-4-1831	Nov. 1839
9. Captain C. Browne	Nov. 1839	
10. Captain D F. McLeod	Dec. 1839	April 1842
11. Captain W. Hoare	May 1842	July 1842
12. Captain C. Browne	August 1842	Feb. 1843
13. Major J. Macadam	April 1843	Dec. 1845
14. Lieut. J. Sleeman...	January	March 1846
15. Captain C. Browne	April 1846	
16. Major J. Macadam	May 1846	March 1850
17. Major A. Skene	March 1850	Dec. 1850
18. Major J. Macadam	January 1851	March 1851
19. Captain R. H. Tulloh ...	April 1851	14-3-1852
20. Lieut. E. Clerk	15-3-1852	31-3-1852
21. Col. J. C. Wood	April 1852	Sep. 1852
22. Lieut. A. H. Ternan	Feb. 1853	1854
23. Captain F. H. Pinkney	1855	19-6-1857
24. Lieut. E. Clerk	20-6-1857	12-10-1857
25. Lieut. C. Baldwin	13-10-1857	22-1-1858
26. Lieut. W. H. Nembhard ...	23-1-1858	6-10-1859
27. Major F. A. Fenton	7-10-1859	Feb. 1861
28. Captain W. H. Nembhard ...	Feb. 1861	May 1865
29. C. Grant, Esq., I C.S.	June 1865	Dec 1865
30. Col M. P. Ricketts	15-2-1866	31-8-1868
31. J. W. Tawney, Esq., I.C.S. ...	1-9-1868	28-4-1869
32. Col. H. C. E. Ward	29-4-1869	24-4-1870
33. J. W. Chisholm, Esq.	25-4-1870	20-3-1872
34. J. B. Goodridge, Esq., I.C.S.	21-3-1872	5-4-1872
35. Major W. S. Brooke	6-4-1872	21-8-1872
36. Major J. A. Temple	22-8-1872	24-11-1872
37 Major W. S. Brooke	25-11-1872	25-12-1873
38. A. H. L. Fraser, Esq.. I.C.S. ...	12-3-1873	5-5-1873
39. Col. H. Lugard	26-12-1873	7-11-1874

List of the Deputy Commissioners who have held charge of the Jubbulpore District, etc.—(concld.)

Name of Deputy Commissioner.	Period	
	From	To
40. Col. H. C. E. Ward	26-10-1874	10-5-1877
41. J. H. Fisher, Esq., I.C.S. ...	15-6-1877	30-6-1878
42. Col. T. W. Hogg	16-10-1878	10-2-1879
43. F. C. Berry, Esq., I.C.S ...	9-9-1879	10-11-1879
44. F. Venning, Esq., I.C.S. ...	......	16-6-1880
45. S. H. Hennessy, Esq.	1-5-1882	15-6-1882
46. Col. C. H. B. Grace	30-11-1879	4-9-1883
47 W. A. Nedham, Esq.	5-9-1883	4-11-1883
48 Col. C. H. B. Grace	5-11-1883	24-3-1884
49 C. W. McMinn, Esq., I.C.S. ...	11-4-1884	19-2-1887
50 F. C. Anderson, Esq., I.C.S. ...	9-5-1887	23-3-1888
51. F. A. T. Phillips, Esq., I.C.S. ...	24-3-1888	4-4-1888
52. J. A. C. Skinner, Esq., I.C.S. ...	5-4-1888	18-4-1888
53 S. Ismay, Esq., I.C.S.	19-4-1888	5-5-1889
54 A. L Saunders, Esq., I.C.S. ...	6-5-1889	20-6-1889
55 S. Ismay, Esq., I C.S.	2-1-1890	31-3-1890
56 A. L. Saunders, Esq., I.C.S. ...	4-4-1890	25-10 1890
57 Col. C. H. Plowden	25-10-1890	21-3-1892
58 F. J. Cooke, Esq., I.C.S. ...	22-3-1892	2-7-1892
59 Col. C. H. Plowden	2-7-1892	21-3-1893
60 A. C. Duff, Esq., I.C.S.	1-4-1893	18-3 1896
61 L. E. P. Gaskin, Esq., I.C.S. ...	21-3-1896	30-3-1896
62 B. Robertson, Esq., I.C.S. ...	30-3-1896	12-8-1896
63. L. E. P. Gaskin, Esq., I.C.S.	13-8-1896	28-9-1896
64. A. C. Duff, Esq., I.C.S.	29-9-1896	5-1-1897
65. M. W. Fox-Strangways, Esq., I.C.S.	6-1-1897	13-3-1897
66. B. Robertson, Esq,. I.C.S. ...	14-3-1897	7-4-1898
67. E. A. DeBrett, Esq., I.C.S ...	7-4-1898	12-10-1898
68. B. Robertson, Esq., I.C.S. ...	13-10-1898	21-3-1901
69. A. Blennerhassett, Esq., I.C.S. ..	22-3-1901	4-8-1901
70. B. Robertson, Esq., I.C.S. ...	5-8-1901	18-2-1902
71. A. Blennerhassett, Esq., I.C.S. ...	19-2-1902	19-4-1902
72. B. P. Standen, Esq., I.C.S, ...	19-4-1902	30-4-1903
73. A. Blennerhassett, Esq., I.C.S. ...	30-4-1903	3-12-1903
74. E. R. K. Blenkinsop, Esq., I.C.S.	4-12-1903	2-2-1906
75. Sir A. Blennerhassett, Bart., I.C.S.	2-2-1906	to date.



Reg. No. 1121 E.. 09.—H.—450.

JUBBULPORE DISTRICT.

CHAPTER I.

GENERAL DESCRIPTION.

BOUNDARIES AND PHYSICAL FEATURES.

Boundaries and extent of District.

1. Jubbulpore is a District in the Jubbulpore Division of the Central Provinces lying between 22° 49′ and 24° 8′ N. and 79° 21′ and 80° 58′ E., in the north-eastern extremity of the Province at the head of what may be called the Nerbudda valley proper. The name of the District is taken from that of the headquarters town which is generally supposed to be derived from the Arabic *jabal*, meaning a rock, because the site on which the town is built is partially rocky. Another derivation is suggested by the vicinity of the classic Tripuri (Tewar), the capital of the Haihayavansi Chedyas mentioned in the Mahābhārat. Some inscriptions[1] of this dynasty have been found which mention Jauli pattala or Jāvāli pattana, of which the most natural corruption would be Jubbulpore. Jāvāli was a Brāhman priest and held sceptical philosophical opinions. Mr. Hīra Lāl has a theory that possibly Jāvāli's followers were not allowed to live in the king's capital, and consequently settled down here and named the place after their leader. Historically Jubbulpore is composed of two distinct portions. The larger portion, which forms the old District, is that tract of country which came under the British rule in 1818, and the other portion is the old native State of Bijerāghogarh, which was confiscated in the Mutiny of 1857 and subsequently in 1865 included in the Jubbulpore District. The District as now composed is bounded on the north by the Maihar State, which lies in the Central India Agency, and on the north-eastern corner by the Pannā State, the territory of which separates the District from the Damoh District. On

[1] Epigraphia Indica, Vol. II, page 1.

the east it abuts on the Baghelkhand State of Rewah. On the south and south-east it is bounded by the Mandlā District. A portion of the southern boundary also marches with the Seonī District. On the south-west it is bounded by Narsinghpur and on the west by Damoh The total area of the District is 3,912 square miles, and it is the tenth largest District in the Province in point of size. It is divided into three tahsīls, Jubbulpore lying in the south, Sihorā in the centre and Murwāra in the north. Its greatest length from south-west to north-east is 120 miles and its greatest breadth from west to east 72 miles.

General appearance.

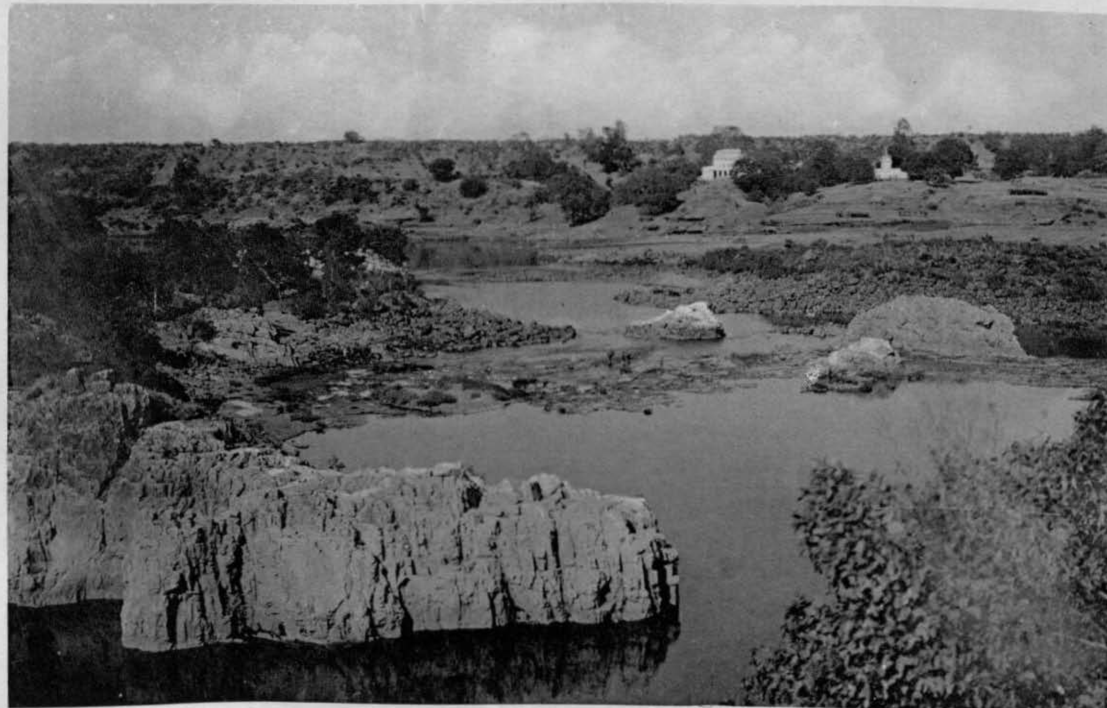
2. Jubbulpore consists of a long narrow plain running north-east and south-west and is shut in on all sides by highlands, forming an offshoot from the great valley of the Nerbudda. The highlands in the distance relieve the monotony of the fertile plain, ringing in the District with a border of picturesque scenery in which hill and valley, forest and stream, succeed each other in rapid variety. The south-western plain, called the Haveli, is one of the richest and most fertile areas in the Province. It consists of a mass of embanked wheat fields, and occupies the valley of the Hiran and Nerbudda rivers, extending from the south-western border of the District as far north as the town of Sihorā, and from the Hiran river flowing close below the Vindhyan hills to the railway line, including also a tract round Saroli beyond the line. Here in the winter months the eye may range over miles of green corn lands only broken by low black boundary ridges or dark twisting footpaths. The western horizon is bounded by the sand-stone cliffs of the Vindhyas, the eastern by the metamorphic rocks of the Bhitrigarh range or its spurs. The Vindhyas seem to rise abruptly from the plain and distance lends them an appearance of height which a closer approach dispels. During the monsoon months, when the country is generally flooded owing to the prevalence of field embankments, the Haveli presents the appearance of a vast lake studded with trees and islands. To the south-east of the Haveli lies an extensive area covered by Deccan trap, which is an important feature of the District. Within this tract are to be seen all the well-known features peculiar to trap formation—the hill-

sides marked by conspicuous terraces, the table-like formation of the hill summits, the prevalence of long grass, and the paucity of large trees, together with the fact that almost all bushes and trees are deciduous. The country presents, except where it is cultivated, a uniform straw-coloured surface with but few spots of green to break the monotony during the cold season from November to March, while from March when the grass is burnt to the commencement of the rains in June the black soil, black rocks and blackened trees present a most remarkable aspect of desolation. But during the rainy season the country is covered with verdure, the contrast afforded by the black rocks only serving to bring in relief the bright green tints of the foliage. The whole of the trap area i inhabited principally by Gonds, Baigās and Kols, whose cultivation is rough and chiefly confined to the production of the smaller millets. In the eastern portion of Bargī and in the better villages of the estate belonging to the Rājā of Imlai, however, good use is made of the occasional deposits of black soil and luxuriant crops of wheat are produced in embanked fields. To the north of the trap area lies the eastern portion of the Sihorā tahsil, a country of hills and jungle intersected by streams or torrent beds. Villages with good soils are found alternating in the most abrupt manner with those of much inferior capacity. The surface is extremely irregular and broken at frequent intervals by hills or low ridges of metamorphic rocks of the transition type. West of Sleemanābād the country is densely wooded and consists mainly of a sequence of ridges of poor soil with here and there an accumulation of better soil in natural basins. But where the Bhānrer cliffs cross the tahsil, a sudden ascent is encountered to the villages of the Bahurīband tract. These are situated on sandy soils composed of the detritus of the Vindhyan rocks. The tract is not well watered, produces more *kharīf* than *rabi*, and from the point of view of cultivation is precarious. Similar to the Bahurīband tract is the western portion of the Murwāra tahsīl, which consists of an undulating plain of sandstone composed chiefly of poor soils. Below the cliffs of the Bhānrer range on the southern border lies a tract of fertile black soil known as the Bāndha-Imlāj Haveli. This tract produces wheat crops equal to those of any other part of the District. The

Settlement Officer in 1835 remarking on the extreme poverty of this tract added that he hoped the day would not be far distant when the people might turn to the improvement of their land by means of embankments, and add to their income by the sale and export of *rabi* produce. This hope has been fulfilled, for works of land improvement have made more rapid progress here than in any other part of the District. But most of the tract still remains conspicuous for the natural poverty of its soil and the absence of shade and vegetation. The Government works of irrigation now in progress will, it is expected, add greatly to the security and prosperity of this somewhat precarious portion of the District. The eastern portion of the Murwāra tahsīl, corresponding to the old Bijerāghogarh pargana, is an open tract of country, somewhat encroached upon to the north by the Kaimur range of hills; in the centre it is traversed from south-west to north-east, almost from end to end, by the Kahenjua hills, a low and straggling range, which sometimes breaks up into two and three ridges, sending out offshoots on either side, which sensibly affect the quality of the soil. Small patches of forest occur in several localities, and the entire eastern and part of the southern boundaries are fringed with thick timber forests. The tract is watered by the Mahānadi and its tributary the Katnī. The best villages are found in a long valley formed by the Kaimur and Kahenjua hills and on the banks of the Mahānadi; they contain black soil and *rabi* cultivation of fairly large extent. A remarkable feature of the tract east of the Mahānadi is the large number of mahuā trees which flourish in the crystalline soils peculiar to the locality.

Hill ranges.

3. The principal ranges of hills are the Bhānrer, the Kaimur and the Bhitrigarh. The Bhānrer range of the Vindhyan system rises along the western border of the District, and forms the boundary between Jubbulpore and Damoh from Katangī to the junction of the Nerbudda and the Hiran in the south-western corner; it stretches in a single ridge of varying height but generally abrupt and lofty, till it reaches the centre, where it throws off numerous spurs, and near Katangī itself it becomes a confused mass of hills over hills, varying in elevation from 2000 to 2500 feet. The Kaimur ridge of



Bemrose, Collo., Derby.

CHANNEL OF THE NERBUDDA NEAR THE MARBLE ROCKS.

the Vindhyas commencing at Katangī runs nearly parallel to the Bhānrer hills, forming the boundary for some distance between Jubbulpore and Damoh. It then bends more to the east, and traversing the west of the Sihorā tahsīl, enters the Murwāra tahsīl, where after a slight break it runs along its entire northern boundary to the north-eastern corner. Where the Vindhyas prevail the country is a series of rounded mounds and gentle depressions; the soils are crystalline and mahuā is abundant; but the forest growth is poor and scanty and good soil scarce. The Bhitrīgarh hills run through the middle of the District from south-west to north. They rise abruptly out of black alluvial deposits; their forest growth is generally good and green even in the hot weather and in their neighbourhood the soils change with startling abruptness.

Rivers.

4. Lying at the junction of the Vindhyan and Sātpurā ranges, Jubbulpore forms part of the great central watershed of India. The southern part of the District is drained by the Nerbudda and its tributaries, the Hiran and the Gaur. The Nerbudda is the principal river that pursues a westerly course. It enters the District from the Mandlā side, and flows towards the west, and traversing the southern portion of the country enters the Narsinghpur District, forming for part of its course the southern boundary between Jubbulpore and Narsinghpur. Its length in the District is about seventy miles. Thirteen miles from Jubbulpore it passes through the well-known gorge of the Marble Rocks. The river here winds in a deep narrow stream through rocks of magnesian limestone 100 feet high, giving an extremely picturesque effect, especially by moonlight. The Hiran rises in the south-east of the District at Kundam, and first takes a northerly course for some distance and then bends to the west, and joining with its principal affluent the Pariat and other minor streams falls into the Nerbudda at Sānkal. The Gaur is a small river. It takes its rise from the Mandlā District and joins the Nerbudda river on the right bank about five miles due south of Jubbulpore. The Mahānadi, a stream of some importance, rises in the Mandlā District. It enters this District from the south-eastern corner, and then pursuing a northerly course and traversing the Bijerāghogarh tract

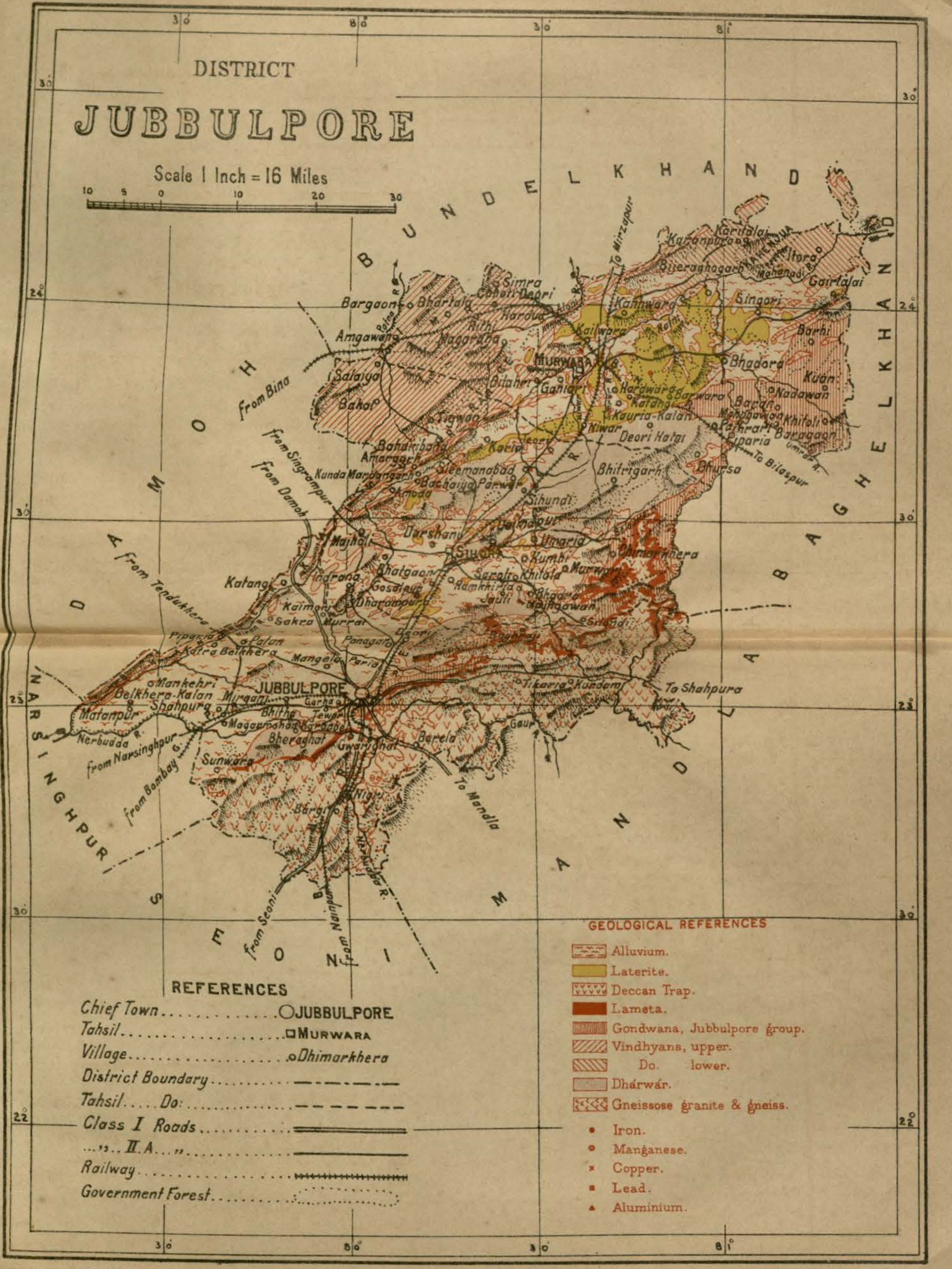
flows into Rewah finally to join the Son, a tributary of the Ganges. During a portion of its course it forms the boundary between Rewah and Jubbulpore. The Niwār and Katnī, which flow by Katnī-Murwāra, are small tributaries of the Mahānadi, into which they fall within the District. The Ken river takes its rise in the Kaimur range on the west, but only flows for a short distance within the District.

Elevation.

5. The elevation of the plain country varies from 1200 to 1500 feet. Jubbulpore station is 1306 feet high, Madan Mahal four miles south of Jubbulpore 1540 feet, and Dharampurā near Bagrai to the further south is 1511 feet. Bichua, a few miles south-east of Panāgar, is 1621 feet high, Gosalpur 1574, Lorā to the north-east of Sihorā, 1923 feet, and Piprod 1953 feet. Murwāra town is 1363 feet high and to the east of Murwāra Jhiria is 1411 feet and Jājagarh 1455 feet. The highest points are found in the southern portion of the District which extends to the tablelands of the Sātpurās, where the village of Duria has an elevation of 2426 feet, and Banjāri trigonometrical hill station one of 2223 feet. The peaks in the western portion of the District have an elevation varying from 2000 to 2500 feet in the vicinity of Katangī. Katangī itself has an elevation of 1411 feet ; Bhitrī and Surahia in the Bhitrīgarh range are 2046 and 2070 feet high respectively. Bhainsākund in the Kaimur range has an elevation of 2038 feet. Lakhrāmpurā in the Kahenjua range in the north-east of the District is 1780 feet high. The general slope of the country in the Sihorā and Jubbulpore tahsils is from north-east to south-west and in some portions in the south-west the elevation sinks to 1361 feet. In the Murwāra tahsīl the general slope is from south-west to north-east, the elevation sinking in some parts to 1080 feet.

Interlacing of boundaries.

6. The boundaries of Jubbulpore interlace with those of the States of Nagod, Maihar, and Rewah. Seven villages of the Murwāra tahsīl, Junwāni, Pachohā, Jhajwāri, Guraiya, Patehrā, Godhan and Surmā lie within the Maihar State, and two villages of the same tahsīl, Kai and Khalindh, lie within the Rewah State. Eleven villages of the Nagod State and two villages of the Maihar State lie within the Murwāra tahsīl.



Reg. No. 1121 E.. 09.—H.—450.

GEOLOGY.

Geology.

7. The attractions of this District for the geologist, mineralogist, and palæontologist,—owing to the large number of geological formations represented, the great variety of minerals of economic value, and the interesting vertebrate and plant remains—have given rise to such an extensive literature, that Jubbulpore requires a lengthier treatment than any other District in the Province.

The geological formations found in this District are the following :—

Quaternary	1. Recent.		
	2. Pleistocene.		
Tertiary	3. Laterite.		
Secondary	4. Deccan Trap.		
	5. Lametā.		
	6. Gondwāna :—Jubbulpore Group.		
Purana :—	7. Upper Vindhyan	*a.*	Upper Bhānrer.
		b.	Lower Bhānrer.
		c.	Rewah.
Purana :—	8. Lower Vindhyan	*a.*	Rohtās Stage.
		b.	Kheinjua Stage.
		c.	Porcellanite Stage.
		d.	Basal Stage.
Archæan	9. Dhārwār.		
	10. Gneissose granite and gneiss.		

(1) *Recent.*—Under this heading come the soils, and the upper division of the Nerbudda alluvium. The soils have, of course, been formed by the surface decomposition and alteration of the underlying formations; they are dealt with in the section on Agriculture.

(2) *Pleistocene*[1].—A considerable portion of the south-western corner of the District is occupied by the eastern end of the great alluvial plain of the Nerbudda, which stretches from a little east of Jubbulpore to Handia, a distance of over 200 miles. This alluvial formation consists of two divisions: one, the upper, is considered to be post-pleistocene in age, and is practically free from mammalian remains, although it contains many recent molluscan shells. It is the formation referred to under 'recent.'

[1] W. Theobald, *Memoirs, Geol. Surv. Ind.*, II, pp. 289, 297, (1860); G. E. Pilgrim, *Records Geol. Surv. Ind.*, XXXV, p. 120, (1907).

The lower division is composed chiefly of a stiff, reddish, brownish or yellowish clay, containing abundance of *kankar* and numerous pisolitic iron-oxide granules. It is usually separated from the underlying rocks by a small thickness of sandy and conglomeratic beds; where this lower alluvium has not suffered too extensive denudation prior to the deposition of the upper alluvium, the clays are usually overlain by a small thickness of sandy and gravelly beds. It is in the last-named beds that the bone remains are usually found that are so characteristic of this series and prove it to be of pleistocene age. These remains consist of mammalia and reptiles, some identical with species now living and some extinct. Molluscan shells are abundant in both the upper and lower alluvium, but they all belong to species now living in the Nerbudda valley. Some of the localities at which bones have been found are in the Jubbulpore District. Among them are Darticachār a few miles above Jhānsi Ghāt, for teeth and bones of *Elephas, Bos, Equus,* and *Trionyx*; and a small patch of sand and conglomerate below the village of Kaimori on the Hiran river, for remains of Ruminants and *Hippopotamus* (*Tetraprotodon* ?).

(3). *Laterite*[1].—This forms irregular patches with a roughly horizontal base resting on the older Dhārwār and Lower Vindhyan rocks, and to a less extent on the Upper Vindhyans. It is most abundant in the Murwāra tahsil, but is also found commonly in the Sihorā tahsil. The lateritic masses of this District do not consist entirely of ordinary rock-laterite. There are also layers of coarse and fine ferruginous sandstones, of red, white and purple clays, and of rich oolitic iron-ores, and high-grade bauxites. The foregoing account applies to the main masses of laterite as found in the neighbourhood of Katnī in the Murwāra tahsil. In the country round Sihorā and Gosalpur in the Sihorā tahsil bauxites have not yet been found; but, on the other hand, manganese-ores are of not infrequent occurrence in the laterite of this area. The clays, bauxites, iron-ores, manganese-ores, and ochres, are further noticed in the section on Minerals.

(4). *Deccan Trap.*—This is the great formation of horizontally-bedded basaltic lavas that occupies such a large

[1] F. R. Mallet, *Records, Geol. Surv. Ind.*, XVI, pp. 103-111, 116-118, (1883).

proportion of the western parts of India. In this District it is found principally along the south-eastern border, approaching very close to Jubbulpore town. This portion of the District may be regarded as the northern edge of the Sātpurā range, and many of the hills here rise to heights of 1600 to over 2000 feet, the highest being Duria, 2426 feet high. The geodic cavities in the traps contain many varieties of zeolites, agates, and jaspers, the two latter of which are often found as pebbles in the bed of the Nerbudda and cut and polished by the local lapidaries into ornamental articles of some value. The character of the trap country is similar to that of Deccan Trap country in other parts of India; and the account given in the Manual of the Geology of India, 2nd edition, pp. 256, 257, of the characteristics of the trap country in general, is applicable to the area covered by this formation in the Jubbulpore District.

(5). *Lametā*[1].—This is a fresh-water formation of Cenomanian age, resting unconformably on all the older formations with which it comes in contact, and usually immediately underlying the Deccan Trap formation. Close to Jubbulpore, and at many other localities, clear evidence has been obtained that the Lametā sediments were subjected to denudation before the eruption of the Trap lavas. In the Jubbulpore District, the formation forms a thin fringe along the north-west edge of the Deccan Trap formation, resting sometimes on the rocks of the Jubbulpore formation and sometimes directly on the gneisses. The greatest thickness exposed is 150 feet which is seen in the Chhota Simla ridge about 2 miles east-north-east of Jubbulpore railway station, the Lametā rocks being well exposed in the neighbourhood of Jubbulpore. The rocks of this group consist of limestones, sandstones, and clays. The limestones are the most characteristic rocks, are usually very gritty, and are further often silicified with the development of patches of chert. This group is, as a rule, singularly unfossiliferous, but remains of a large Dinosaurian reptile, *Titanosaurus indicus*, have been found near Jubbulpore. The name of this formation was

---

[1] J. G. Medlicott, *Mem., Geol. Surv. Ind.*, II, pp. 196-199, (1860); H. B. Medlicott, *Rec., Geol. Surv. Ind.*, V, pp. 115-120, (1872); R. Lydekker, *Rec., Geol. Surv. Ind.*, X, pp. 38-41, (1877).

proposed in 1860 by Mr. J. G. Medlicott after Lametā Ghāt on the Nerbudda river some 2½ miles south-east of the Marble Rocks, where a good section of these beds is exposed.

(6) *Gondwāna :—Jubbulpore Group.*—This is one of the uppermost divisions of the Upper Gondwânas, and receives its name from the town of Jubbulpore, in the neighbourhood of which it is well developed. It consists of 'clays, shales, 'and earthy sandstones, with some thin beds of coal. 'The clays and soft shales, which are the most char-'acteristic beds of the formation, are pale coloured, 'usually white, pale lavender grey, or pale red. The 'sandstones are generally coarse and conglomeratic. 'Carbonaceous shales are met with in several places, and 'occasionally one or more thin bands of jet-coal, very 'different in character from the coal of the Damuda 'formation. Limestone is rare. At the base of the forma-'tion, when resting upon gneissic rocks, there is fre-'quently found a coarse, compact sandstone, so hard and 'compact as almost to resemble a quartzite. It is often 'conglomeratic, and the matrix containing the pebbles 'consists of white earthy rock in a porcellanic condition. 'Occasionally, but rarely, this bed is calcareous.'[1]

The thickness of this group probably nowhere exceeds 1000 feet. In the Jubbulpore District it rests unconformably on both the Dhārwārs and the gneisses, and crops out as an irregular broken strip, running past Jubbulpore town in a north-east direction, between the outcrops of the Dhārwārs and gneissose-granites to the north-west and the Lametās and Deccan Trap to the south-east. The dip of these rocks is usually small. From a study of the fossil plants—ferns, cycads, and conifers—found in this formation, it has been determined as Jurassic in age. Many of these plants were found in the neighbourhood of Jubbulpore itself. Inferior coal is found in the exposure of this formation at Lametā Ghāt.[2]

---

1 Manual of the Geology of India, 2nd edition, p. 187.

2 See also :—
J. G. Medlicott, *Mem., Geol. Surv. Ind.*, II, p. 176, (1860).
T. Oldham, *Rec., Geol. Surv. Ind.*, IV, p. 75, (1871).
H. B. Medlicott, *Mem., Geol. Surv. Ind.*, X, p. 10, (1873).
O. Feistmantel, *Rec., Geol. Surv. Ind.*, IX, p. 126, (1876).
O. Feistmantel, *Rec., Geol. Surv. Ind.*, X, p. 140, (1877).
W. Waagen, *Rec., Geol. Surv. Ind.*, XXI, p. 89, (1888).
F. R. Mallet, *Rec., Geol. Surv. Ind.*, XXII, p. 146, (1889).

(7). *Upper Vindhyans*[1].—Practically the whole of the north-western frontier of the District is occupied by the Upper Vindhyans, the average strike of which is north-east with the dips to the north-west. The uppermost division is the *Upper Bhānrers*, which consists of sandstones, sometimes thin-bedded and sometimes massive. They form the Bhānrer Hills lying to the north-west of the Hiran river in the Jubbulpore tahsīl, and cover a large area in the western portions of the Murwāra tahsīl. They rest conformably on the *Lower Bhānrers*, which form a thin fringe between them and the Upper Rewahs, along a N.E.-S.W. line between Bilahrī and Katangī, but which, to the south-west of Katangī, are either obscured by alluvium or absent. The Lower Bhānrers consist of shales, limestones, and sandstones. The *Upper Rewahs* form a thin fringe of rocks on the south-east side of the Bhānrers, from which they seem to be separated by a strike fault, through a large portion of their course in this District. The Upper Rewahs consist of massive to flaggy sandstones, and form the range of hills known as the Kaimurs, running with a north-east strike from the neighbourhood of Katangī, along the north-west frontier of the District, and then across the middle of the Murwāra tahsīl to near Bilahrī, where the Rewahs bend north for a few miles, widening out at the same time; after this they again turn north-east, narrowing again, cross the East Indian Railway, and give rise to the well-marked portion of the Kaimur range that here forms the north-west boundary of the District. The boundary between the Rewahs and the Dhārwārs to the south-west of Bilahrī is a strike fault, which continued to the north-east of Bilahrī separates the Lower Vindhyans and Dhārwārs for some distance. The following shows the approximate thicknesses of the various Upper Vindhyan groups in the neighbourhood of Katangī:—

Upper Bhānrers	650 feet.
Lower Bhānrers	1,450 ,,
Upper Rewahs	1,000 ,,

(8). *Lower Vindhyans.*[2]—This formation, which, as its

[1]. F. R. Mallet, *Mem., Geol. Surv. Ind.*, VII, pp. 72-74, 85, 97, 101, (1871).

[2] F. R. Mallet., *Mem., Geol. Surv. Ind.*, VII, p. 29. (1871); R. D. Oldham, *Mem., Geol. Surv. Ind.*, XXXI, pp. 12-27, (1901); E. Vredenburg, *loc. cit.*, pp. 93-108.

name implies, underlies the Upper Vindhyans, forms a strip of country in the north-east portion of the District, between the Upper Vindhyans and the Dhārwārs. A little to the south-west of Katnı the Lower Vindhyans disappear, owing to faulting that has brought the Rewahs and Dhārwārs into contact. This series can be divided into four stages, all of which are found in this District. The *Rohtās stage* consists of limestones with associated shales, and it is these limestones that are worked at Katnī and usually spoken of as the Katnī limestones. The *Kheinjua stage* is found well developed in the Kahenjua (*Kheinjua*) range in the extreme north-east corner of the District. The rocks of this stage are principally shales and sandstones, but in the Kahenjua range there are three thick bands of limestones. The *Porcellanite stage* has been traced as a thin band running for about 11 miles in a north-east direction through Barhī to Amarpur on the boundary of the District in its north-east corner, with another band some four miles to the north. The porcellanites are black to pale green rocks with a porcelain-like fracture. They have been shown to be altered rhyolitic tuffs, and are thus of volcanic origin. The *Basal stage* is found as a thin band immediately to the south-east of the Amarpur porcellanite band, and also as an inlier in the more northern band of porcellanite. It consists of sandstone and conglomerate overlain by shales and limestones.

(9). *Dharwars.*[1]—These rocks form a central strip to the District, oriented in the customary N.E.-S.W. direction, with the Vindhyans lying to the north-west and the gneissose granites, Gondwānas, Lametās, and Deccan Trap, to the south-east. The south-west portion of the strip of Dhārwārs, where it occupies the angle between the Hiran and Nerbudda rivers, is largely obscured by the Nerbudda alluvium; whilst in the neighbourhood of Katnī it is often capped by laterite. This formation was formerly regarded as of Bijāwar age, but it is now thought to be much older and the equivalent of the Dhārwārs of Southern India. The

[1] J. G. Medlicott, *Mem.*, *G.S.I.*, II, pp. 134-136, (1860);
F. R. Mallet, *Rec.*, *G.S.I.*, XVI, pp. 94-118, (1883);
P. N. Bose, *Rec.*, *G.S.I.*, XXII, pp. 216-226, (1889);
T. H. Holland, *Rec.*, *G.S.I.*, XXXII, p. 59, (1905);
L. L. Fermor, *Rec.*, *G S.I.*, XXXIII, p. 98, (1906).

large variety of ores—iron, manganese, copper, lead, &c.—associated with it is not inconsistent with this interpretation. The characteristic rocks of this formation as exposed in this District are marbles (both dolomites and limestones), quartzites, jaspery quartzites, jaspers, hematite and magnetite quartzites, slates, phyllites, talc-schists (soapstone), and green schists (basic igneous rocks). Quartzites, slates, and hematite-quartzites are well developed in the neighbourhood of Sihorā and Gosalpur, where secondary iron and manganese-ores are found in association with these rocks. Dolomites and limestones are well developed in the beautiful spot on the Nerbudda known as Bherāghāt or the Marble Rocks[1] and in the country round Sleemanābād. Quartz-veins, sometimes containing minerals of value, often traverse the Dhārwārs, *e. g.*, in the country round Sleemanābād, where the veins contain copper, lead, silver, gold, and barytes, and are associated with veins of quartz-porphyry containing fluorite. The rocks of this series are usually steeply dipping and sometimes traversed by dykes of igneous rock, *e. g.*, the acid dykes of Sleemanābād[2] and the basic ones of the Marble Rocks.[3]

(10). *Gneissose Granite and Gneiss.*[4]—The gneissose granite is found in isolated patches at intervals along a N.E.-S.W. line, from near Lametā Ghāt on the Nerbudda, through Jubbulpore, for some miles to the north-east. The granite often gives rise to barren rocky tors or small hills rendered conspicuous by huge boulders of granite. The hill on which stands the old Gond castle known as the Madan Mahal is an example. These gneissose granites are grouped with the Dhārwārs as of Archæan age; and of these two divisions of the Archæan the granite is considered to be the younger, on the evidence of several sections found in various parts of the Nerbudda valley showing the granite intrusive in the Dhārwārs or including portions of the Dhārwārs. It is possible that there is also a certain amount of true gneiss in this District older than the Dhārwārs.

---

[1] E. Vredenburg, *Rec., G.S.I.*, XXXIII, p. 41, (1906).
[2] L. L. Fermor, *Rec., G.S.I.*, XXXIII, pp. 62-64, (1906).
[3] J. G. Medlicott, *Mem., G.S.I.*, II., p. 218, (1860).
[4] *Mem., G.S.I.*, II, pp. 120-130.

BOTANY.

Botany. Hot season.

8. The forests of the District belong to the great type known as 'deciduous' and the majority of the trees comprising them are leafless in the hot season from February to May. During this season the facts which probably strike the usual observer most are :—

(1) That there is a general absence of herbaceous growth.

(2) That although the majority of the trees are leafless, several are just assuming their spring garb of fresh young foliage.

(3) That many trees are now conspicuous on account of their brightly coloured flowers.

At this time of year among the most noticeable trees are: *Butea frondosa* (Vern. *chheolā*). This tree is especially common on black soil and on the low rocky hills of metamorphic rock found in the Sihorā tahsīl. The flowers usually appear in February-March on the upper branches which are then bare of foliage, and they are remarkably beautiful with their orange-red petals and velvety dark ferruginous green sepals. The tree is often gregarious and the masses of its flowers form a conspicuous feature of the landscape. The flowers are much frequented by *mainās* and appear to be largely fertilized by them.

Cochlospermum Gossypium (Vern. *gabdi*, *ganiār*). The bare branches of this species are now conspicuous with their great yellow flowers.

Bombax malabaricum (Vern. *semar*), the silk cotton tree now leafless and bearing large red flowers which are much frequented by birds.

Erythrina suberosa (Vern. *haruwā*). Now leafless and covered with bright scarlet flowers.

Bauhinia variegata (Vern. *kachnār*). Nearly leafless and covered with beautiful large purple and white flowers.

Cassia Fistula (Vern. *amaltās*). Towards the end of the hot season this tree is a beautiful spectacle with its dark red-brown and fresh green young leaves and magnificent racemes of bright yellow flowers.

Among flowering shrubs at this season *Woodfordia floribunda* (Vern. *dhawai*) covered with red flowers which are largely used for dyeing is perhaps most conspicuous.

Among trees which are noticeable in the hot weather on account of their being in leaf when the majority of other trees are bare are :—

(1) The *sāl* tree (*Shorea robusta*), which however is not common in the District and is indeed confined to the Gondwāna sand-stones and conglomerates in the neighbourhood of the Mahānadi river and its tributaries in the east of the Jubbulpore District, the principal *sāl* forests being the Khitoli reserves in the Murwārā tahsil. All are in this District at the northern limit of teak and the western limit of the Peninsular area of *sāl*, neither of these important species being here at their best, or attaining large dimensions.

(2) The *jāmun* (*Eugenia Jambolana*) which is very commonly planted in avenues on account of the excellent shade afforded by its leafy crown against the fierce sun of the hot season.

(3) The *kusum* (*Schleichera Trijuga*), the young leaves of which usually appear in March and are at first purple or red.

(4) The *harrā* (*Terminalia Chebula*), the pale green foliage of which is very noticeable in the leafless forests in April-May.

(5) The mahuā (*Bassia latifolia*). The well-known fleshy corollas of the flowers of this species are gathered in March-April and are largely used for food and in the manufacture of native spirit. Towards the end of April the young crimson-coloured leaves appear and in May the new foliage is very beautiful with varying shades of red, bronze and green.

(6) The pipal (*Ficus religiosa*) with its glittering young leaves, red and green in colour, which shiver in the wind something like those of an aspen.

(7) The banyan (*Ficus bengalensis*) which is very welcome on camping grounds on account of the beautiful shade afforded by its wide-spreading branches.

Very common also in the District is the *karondā* shrub (*Carissa spinarum*), particularly in the trap-rock region and

on black soil. This, in the hot season, is a very noticeable feature of the scenery, the fresh green of the young leaves, the white, star-like, strong scented flowers which appear in March-April, affording a very pleasant contrast to the black rocks, dark soil and dried up, red and yellow grasses which usually surround it.

Rainy season.

9. The rainy season from June to October is the season for universal vegetative activity both in the forests and in the open country. The latter which, in the hot season, was parched and practically bare of vegetation is now covered with a beautiful mantle of grass or other herbaceous growth, while all the trees and shrubs are in full leaf.

Green is now everywhere the prevailing colour, and this is the season which reminds one most strongly of the summer in more temperate climates, with the cloudy sky and the beautiful play of light and shadow over the landscape.

In the forest, brightly coloured flowers are now conspicuous by their absence, although in the undergrowth the shrub, *Thespesia Lampas*, is often seen, its great yellow flowers with purple centres shining out like lamps in the shade of the heavy foliage. Towards the end of the rains also the teak tree is conspicuous with its large panicles of small white flowers, while the *bargā* (*Kydia calycina*) is also noticeable with its white flowers.

In the open country the *babūl* (*Acacia arabica*) with its sweet-scented small yellow balls of flowers and feathery foliage is conspicuous in roadside avenues and elsewhere on black cotton soil, while in shrub forest *Mimosa rubicaulis* with its little pink balls of flowers, the climber *Gloriosa superba* with its beautiful red and golden flowers, several *Convolvulaceæ*, such as *Argyreia sericea* with large pink flowers, *Rivea hypocrateriformis* with white flowers, smelling like honeysuckle, many yams (*Dioscorea*), climbers with handsome foliage and large tubers much valued as a famine food, several species of vine, among which *Vitis latifolia* is most universal and *Vitis auriculata* fairly common with a large red fruit like a cherry, the small shrub *Leea aspera* with handsome foliage and small white flowers, are all very common.

In the banks, between the fields, the handsome, ginger-like *Costus speciosus* with large white flowers and red bracts and

Clerodendron serratum, a shrub with pink spikes of handsome blue flowers are perhaps most noticeable.

In grass lands, the low shrub *Leea macrophylla* is common with great leaves like elephant's ears, also the very handsome herb *Exacum tetragonum* with its large purple and white flowers which, in its habit, reminds one of the English Ladies' smoke (*Cardamine pratensis*). With the latter also are often seen the tall white flowered spikes of the ground orchid (*Habenaria commelinifolia*). In the flooded fields and near streams *Crinum* with handsome white flowers is common.

In places, especially near villages, considerable areas are covered by the common Balsam (*Impatiens Balsamina*) with its purplish flowers.

Old mango and other trees are now gay with masses of the epiphytic orchid (*Loranthus longiflorus*) with its handsome cream-coloured flowers, tesselated with dull purple and brown.

Cold season.

10. The cold season from November to January reminds one of the English autumn. The trees now begin to shed their leaves and many can be recognised by the characteristic tints assumed by the foliage before the leaves fall. The leaves of *seja* (*Lagerstroemia parviflora*) turn a pale leather brown, those *of kumbhi* (*Careya arborea*) dark purplish-red, those of *gunjā* (*Odina Wodier*) bright yellow, those of *kenkar* (*Garuga pinnata*) red.

In the hedges, at this season, *Caesalpinia sepiaria* with its large racemes of handsome bright yellow flowers is very noticeable, while several shrubs in the forest are also in flower, such as *Hamiltonia suaveolens* and *Dædalacanthus purpurascens*. In scrub forest the climbers *Ichnocarpus frutescens* and *Porana paniculata* with masses of small white flowers are now very conspicuous.

WILD ANIMALS, &C.

Wild animals.

11. The Primates are poorly represented in Jubbulpore, only 2 species of monkey being found; the Bengal monkey (*Macacus rhesus*), and the *langūr* (*Semnopithecus entellus*). The former locally known as *Lalmuhā* (red faced) is a moderate sized monkey, with straight brownish grey hair, and a short tail; it is

easily recognised by its flesh-coloured face and buttocks, which are naked. It is seldom found in the forest, but frequents villages, where no doubt its wits become sharpened, as it is very intelligent. The *langūr* or *Karmuhā* (black faced) is the common monkey of the Central Provinces, and is found, both attached to villages and in forests. Familiarity breeds contempt, so it is not surprising to find the former bold and mischievous, whereas the latter is comparatively shy. The *langūr* is easily recognised by his black face, ears, hands and feet, and the grey 'halo' of hair which surrounds his face. The hair of the body is grey or brownish grey, lighter on the under parts. The tail is long and its activity is extraordinary. *Langūrs* are usually found in troops of about 20 individuals, of all ages and sexes, the leader being a male in his prime, whose position is maintained by the law of battle. They have a number of calls, the most common being a loud 'whoop' which can be heard at a great distance, and a harsh grating noise like a double hiccup. This noise denotes alarm and is often of great use in indicating to sportsmen the whereabouts of some dangerous animal. The town of Murwāra was for several years much troubled by troops of *langūrs* who were perpetually destroying the roofs of the houses in spite of their being covered with thorns. The Hindus could not kill them for fear of having no progeny in their next birth. Finally a subscription was raised, and a large number were entrapped and despatched to Bombay.

Mr. Chatterji refers to the existence of another small species of monkey (allied to the *Macacus rhesus*) which, he states, is sometimes found in the forests near water. He describes it as inoffensive, living mostly on wild fruits and easily tamable. The monkey answers to the description of the bonnet monkey of Madras (*Macacus Sinicus*) but there has hitherto been no record of its being found north of Chānda.

The *Chiropteræ* or flying mammals are a class of animal seldom studied and it is almost certain that the list of recorded species is incomplete. They are exceedingly numerous and owing to their power of flight natural checks on their distribution are few. The most interesting species is the flying fox, or Indian Fruit Bat (*Pteropus medius*) which is a

common feature of the Indian twilight. The animal varies in colour from yellowish brown to very dark brown. The expanse of wing is from 3 to $3\frac{1}{2}$ feet and the weight is about 18 ounces. It subsists entirely on fruit or vegetable matter. It is nocturnal and during the day can be seen in large colonies hanging in thick clusters, and head downwards, commonly in a tamarind tree or a bamboo clump. The female has one young one in spring, which she carries clinging to her breast for about a month after birth. The small or Indian vampire bat (*Magaderma lyra*) lives on insects, worms and small frogs.

The *Felidæ* are numerously represented. Several of the numerous wild cats vary but slightly and as they are seldom shot and still more rarely preserved or described, it is possible that several other species exist in addition to those about to be described. The largest and most important of the genus is of course the tiger (*Felis tigris*) whose appearance is so well known as to make a description unnecessary. The tiger occurs wherever good cover of any extent and a permanent water-supply are found, as a rule singly but occasionally in troops of 5 or 6. Although gifted with marvellous powers of sight and hearing and considerable cunning, still his lack of the sense of smell and comparative indifference to the presence of man make him easy to shoot and the number of tigers is being rapidly reduced in consequence. The usual method of hunting is to tie up a young buffalo as a bait in a likely spot, and when the tiger has killed it, he is either driven up to the sportsman or is shot over the dead buffalo, on his return to feed. The tiger has come so much under the observation of naturalists and sportsmen that merely a resumé of the more important facts known regarding this most interesting animal can be given. The period of gestation is 14 to 16 weeks. Two or three cubs are the usual number born at a time, 5 is the limit. The cub remains a year to 18 months with the mother. Sometimes the family is joined by the male tiger but a family quarrel occasionally occurs, and results in the cub being killed and eaten by its father. A tiger probably does not reach its full growth until the 5th year, and the extreme age they attain is not certain but animals of 15 or 20 appear to be still in their prime. The length

of a Central Provinces male tiger fully mature averages 9′-2″ measured between uprights. The tail is about 3 feet long. The weight is 400 lbs. Tigers of over 10 feet are occasionally shot but the 11 feet tigers which are sometimes got in other parts of India do not seem to exist in the Central Provinces. Probably the habit of measuring along the curves instead of between uprights, which adds about 5 inches to the total length, and considerable variations in the length of the tail which are not unusual, may account for this difference in length. Compared with many other animals the intelligence of the tiger is of a low order ; he is possessed however of extraordinarily strong instincts, which under most circumstances stand in the place of intelligence. His adaptability to new surroundings is slow. The tiger is seldom heard to roar, nevertheless he has at least 6 distinct cries. He seldom attacks unprovoked and even when wounded can often be driven out of cover without charging. Nevertheless the ease with which he can conceal himself and the fury and the intimidation of his onslaught, accompanied as it is by loud grating coughs, make him one of the most dangerous animals that exist. His food consists of whatever flesh he can procure, carrion included ; deer, pigs, porcupines and village cattle form the bulk of it. The tiger kills with his teeth, if possible seizing the animal by the throat at the first rush. Occasionally he kills by a blow of the paw, but in such cases the blow is struck in mischief rather than with the intent to procure food. If the kill is in the open the tiger drags it under cover, and if no cover is handy he will tear up grass with his teeth and cover the carcass to conceal it from vultures. After killing the tiger disembowels his victim and makes his first meal off the hind quarters ; he then retires to some shady spot with water handy. The tiger swims readily and frequently lies in pools of water during the hot weather and rains. The only animal he occasionally consorts with besides his own species is the jackal. The tiger sometimes becomes a confirmed cattle killer, but in Jubbulpore a man-eater has not been heard of for many years.

The next most important member of the feline tribe is the leopard or panther (*Felis pardus*). All gradations of size and variations in spots are met with, making it impossible

to define more than one species. Here again a description of the appearance of this well-known animal is not required. Cases of melanism occasionally occur. The leopard unlike the tiger readily climbs trees and regularly haunts the vicinity of villages, having little fear of man, and not uncommonly entering huts at night in search of prey. Leopards are quite common in the District. Unlike the tiger, the leopard begins by eating the entrails of his victim first. Man-eating leopards have not been met with in the District for many years, but when they do occur owing to their intimate knowledge of the ways of man they prove a terrible scourge. The length varies from 5 feet to 7 feet. The tail varies greatly even in the number of vertebræ but is longer in proportion than that of the tiger.

Of the smaller cats the Indian Desert cat (*Felis ornata*) and the jungle cat (*Felis chaus*) are those most commonly met with. The caracal (*Felis caracal*), sometimes called the Indian Lynx, is said to exist but is very rarely seen.

The hunting leopard (*Felis jubata*) is said to be found in parts of the Murwāra tahsil. In appearance it is like a leggy slender leopard, of a rufous colour, spotted all over with black spots, without pale centres, and evenly distributed. It frequents open country, is easily caught and tamed and used for hunting black-buck.

Of the numerous family of *Viverridæ* or civets and mongooses, the Indian Palm Civet (*Paradoxurus niger*) and the mongoose (*Herpestes mungo*) are the two species most commonly met with. The latter inhabits hedge rows or outhouses. It is almost omnivorous and although destructive is also the friend of man in that it keeps down vermin, including snakes. It is easily tamed and makes a charming pet. Only one species of the *Hyænidæ* is found, namely the striped Hyæna (*Hyæna striata*). This large and ungainly animal, though common, is seldom seen as its habits are nocturnal ; it is a solitary animal but occasionally as many as five may be found together. During the day time the Hyæna lies up in a dense bush or more frequently in a cave or an enlarged porcupine's burrow, coming out at night to scavenge or kill young and helpless animals : unlike the same animal in Africa it shows no courage and has not been known to attack an adult man. It has several

cries, the one most commonly heard being a prolonged laugh. It is highly intelligent, easily tamed, and makes an excellent and devoted pet.

The *Canidæ* are well represented. The Indian wolf (*Canis pallipes*) belonging to the genus *Canis* and the largest representative of the family is sometimes found in the western portion of the Sihorā and the north of the Murwāra tahsil. In appearance it is much like other wolves but rather more reddish in colour. This animal may be expected wherever large plains with small rocky hills are found : wolves seem never to frequent thick forest. They are usually found in pairs but occasionally in small packs, which probably comprise one family. Their food consists chiefly of antelope, sheep, and goats ; occasionally they are man-eaters. In spite of their great cunning and although only a few are killed annually, their numbers are diminishing rapidly. The other species of the same genus found is the jackal (*Canis aureus*). This animal is exceedingly common and its peculiar wailing call can be heard almost any night. Its food is varied and consists of carrion, fruit and any animal it can kill. In appearance it resembles a large English fox. The colour varies much : pure tawny and almost blue specimens are found, the usual colour being a mixture between the two.

The genus *Cyon* is represented by the Indian wild dog (*Cyon dukhunensis*). This animal of late years has increased, and is now common in most of the extensive forests of the District. It has the deep chest and narrow waist of the greyhound with the head of a bull-terrier : in height and weight it very much resembles the ordinary village pariah, but individuals vary greatly in size and colour. The usual colour is a rusty red but a tinge of black is not uncommon. The tail is short, about 8 inches, with a black tuft of hair some 6 inches long tipped by a white spot in some specimens. This animal is one of the most interesting found in India on account of its close resemblance to the domestic dog. Although not directly descended from the wild dog the domestic dog nevertheless bears a greater resemblance to the wild species than the more closely related wolf and jackal. The wild dog has been heard to utter most of the sounds made by tame dogs and many of its traits such as fawning and whimpering are identical in circumstances and manner

in both species. It has not been successfully tamed. The breeding season varies but the majority of cubs are whelped in March, usually in a cave or the disused burrow of some other animal ; 3 to 6 are born at a time. Both parents tend the young which are fed at an early age, like dogs, from the parents' vomit. Except when breeding the dogs congregate into packs of from 3 to 30 individuals ; as they have an aversion to carrion or meat that has been visited by vultures, they kill almost daily and are by far the most destructive of the *Carnivoræ.* If they chance on a fresh kill of some other animal they do not scruple to dine off it. They feed by tearing off lumps of meat and skin and swallowing them whole. Their method of hunting varies somewhat according to their numbers. In a small pack one dog takes up the running, while the rest lie well behind, and cut off corners, the leader being replaced at intervals by a fresh animal. If the leader has temporarily lost his companions he gives tongue : their powers of scent are good and they trust to wear down their quarry. The kill is effected by a successful snap at the flank which opens up the animal's intestines if it is galloping or if at bay they rush in on his head and flanks. With a large pack the hunt is much more a course than a prolonged hunt, and in long grass a large pack have been observed to surround a small deer and hunt it by leaping in the air as a collie does when hunting a rabbit in corn. They are fearless of man but will not attack him. When in large numbers they probably attack all other animals, it has been asserted, even the tiger.

The genus *Vulpes* is represented by the Indian fox (*Vulpes Bengalensis*) ; the colouring varies considerably in different individuals and seasons. Anyone acquainted with the English fox would at once recognise the Indian fox as his brother in miniature. It is common in all the plains of the District and lives in large burrows and avoids heavy jungle. It is extraordinarily agile and gives a good run with dogs.

Amongst other interesting members of the order of *Carnivoræ* may be mentioned the Indian *ratel* (*Mellivora Indica*) which is common but on account of its nocturnal habits is seldom seen.

The genus *Lutra* is represented by 2 species :—the common otter (*Lutra vulgaris*) and the smooth Indian otter

(*Lutra Ellioti*). They are found chiefly in rivers, the former species being especially common and often seen in schools of 5 or 6 individuals ; occasionally as many as 20 will congregate in one pool.

Of the *Insectivoræ* a large number exist but exact information is not available for this District.

The Rodents are well represented. Of the family of *Sciuridæ* or squirrels, 4 have been recorded and probably some others exist. The most curious of these is the large brown flying squirrel (*Pteromys oral*) which is sparingly met with in most of the larger forests. This animal is dark brown or black, lighter along the stomach and under parts. It is provided with a parachute or membrane between its fore and hind legs and along its sides by means of which it can prolong a leap from one tree to another by sailing. Another beautiful squirrel is the large Indian squirrel (*Sciurus Indicus*) which also inhabits forest areas. This animal is rich chestnut in colour, and is about 17″ long, with a tail of 14″ ; it is easily tamed. The palm squirrel (*Sciurus palmarum*) is found in such numbers everywhere that no description of this lively little animal need be given.

The family of *Muridæ* is also an exceedingly numerous one, but as no special interest attaches to this class of animal it will be sufficient to merely mention those species possessed of peculiar features. Foremost amongst these is the antelope rat (*Gerbillus hurrianæ*) which by means of its kangaroo-like legs can spring a distance of 4 or 5 yards. The Bandicoot rat (*Nescocia bandicota*) is probably the largest rat in the world, weighing 2½ to 3 lbs., the body being 12″ to 15″ long. This loathsome animal, though fairly common, is seldom seen on account of its nocturnal habits. The Indian porcupine (*Hystrix leucura*) is a common animal, chiefly found in forest areas where it lives in burrows, rocks or holes. It is covered with coarse bristles 8″ to 12″ long, marked with black and white bands ; a full grown animal is 30″ long and weighs 40 lbs. When alarmed it erects its spines, rattling them and uttering a grunting noise, and will charge backwards inflicting severe wounds. It has been known thus completely to transfix a dog. Its food consists of roots and vegetables.

The common Indian hare (*Lepus ruficaudatus*) is numerous throughout the District and the only specimen of the genus *Lepus* hitherto recorded.

The family of *Ursidæ* is represented by one specimen, the Indian or sloth bear (*Melursus ursinus*). This animal is found only in the north-east of the Murwāra and the south of the Bargī range and is not very common. It is clothed with black shaggy hair, while the muzzle is dirty grey; its small wicked eyes combined with its blubberous lips give it a clownish appearance. There is a dirty white horse-shoe mark on the chest. A few brown specimens have been killed. The animal varies from about 4′ 8″ to 5′ 8″ in length, and weighs from 200 to 300 lbs. The claws are long, white and very formidable. Its food consists of insects, honey and fruits. The bear is usually solitary, but 4 or 5 individuals may be found together. The cubs, 2 in number, are born in December or January and are carried on the mother's back to which they cling by means of her long matted hair. The bear is possessed of a very high degree of intelligence, and is easily tamed and trained. His eyesight and hearing powers are poor but his sense of smell is acute. Probably of all the animals found in the forest he is the noisiest, the most absurd. He is a creature of sudden impulses. This trait leads to sudden and unprovoked attacks on men, and no animal is so dangerous to encounter unarmed; when wounded he usually tries to escape but will charge wickedly on occasion, and his powers of offence are worthy of respect. The bear readily climbs trees and can get over the most difficult ground at a surprising pace, a common method of descent being to 'Catherine Wheel' down a hill rolled up like a ball. The number of sounds he emits is more varied than in the case of any other animal and two bears have been heard to keep up what appeared to be a regular discussion while shuffling through the forest.

The *gaur* (*Bos gaurus*) exists in certain forests of the Sihorā range, where there are two small herds under protection. It also comes over from the Rewah State during the hot months to some of the forests of the Murwāra range when the forests of the former are burnt. It is particularly fond of hills and is usually found on the highest ground in the forest, only descending as the lack of water or food

requires: considering its size the *gaur* can traverse extraordinary difficult ground. The animal has a most noble carriage and in spite of its immense bulk has a well-bred look. The body is huge when compared with the rather short slender legs and small gamey feet. The height is added to by a dorsal ridge which extends half way down the back. The skull has a high convex ridge from each side of which the short massive curved horns arise. In height the animal in the Central Provinces rarely attains 18 hands at the shoulder and the maximum length of the horn round the curve is 33″. Central India specimens are therefore not so large as those of Burma, where a height of 21 hands has been recorded and a horn measurement of 39. In old animals the horn is much worn. A small dewlap is sometimes present. The colour is a deep brown almost black. The legs from above the knees downwards are white, the face is dirty white. The hair in the axil and groin is golden. The horns are greenish with black tips. In some individuals the brown is replaced by a dun-colour which seems to have no connection with age. The hair is generally scarce on the body and the colour is due to the pigmentation of the skin. They live in herds from 4 to 16 individuals; more are seldom found in one herd. Bulls are often solitary or in pairs. The rut takes place in January and calves are dropped in August and September, but a few are born in spring. It is pleasant to record that this noble animal under strict preservation is holding its own. When wounded and followed up it will rarely charge and as it abhors man and all his ways, does no harm to crops. The food consists of bamboo leaves, coarse grasses and the leaves, fruits and barks of certain trees. Its sense of hearing and sight are very poor, but its powers of smell are phenomenal: with precautions as to wind therefore, it is easily stalked and shot. The animal possesses a very powerful sweet smell, not unlike that of the domestic cow, which clings for some time to country it has traversed. They have a number of cries such as one expects oxen to possess, a notable exception being a curious piping note made by the bulls when rutting.

There are four species of antelope found, the largest of which is the *nīlgai* (*Boselephas tragocamelus*) which is the

only surviving Asian form of a group of antelopes now common in Africa. The adult bull is dark blue, almost black, in colour; younger specimens are brown. The mane, a tuft of coarse hair on the throat, parts of the ear and the tip of the tail are black. Two spots on each cheek, a patch on the throat, the abdomen, the lower surface of the tail, and a ring above and below each fetlock, are white. The height is about 14 hands; a fair sized bull weighs 600 lbs. The male possesses two black short horns which grow upwards and forwards. The female is brown in colour and hornless. They are found all over the District in forests which are not very hilly. Bulls are often solitary. As this animal is a poor trophy it is seldom shot but gives good sport when ridden. The fourhorned antelope (*Tetraceros quadricornis*) is found in most of the dense forests. It is often met with grazing on fallow fields adjoining the forests or on boundary lines. In appearance it is a small rufous coloured antelope, 25″ high at the shoulder. It is the Indian representative of the Dinkers at present so common in Africa: unlike other antelopes of India it is not gregarious. Adult males possess 4 horns, 2 in the usual place and 2 in front of and in line with the back pair. The anterior horns are about 1″ in length and the posterior 4″. Occasionally the anterior pair are absent and it is possible two varieties exist. They are exceedingly dainty feeders, and the meat is excellent. The Indian black-buck (*Antelope cervicapra*) is not so common as in the adjoining District of Narsinghpur. This animal is so well known that its appearance need not be described. The height of a good buck is 31″ and it weighs 90 lbs. They congregate into large herds and are essentially animals of the plains. Horns of males rarely exceed 20″ in the District; females very rarely have horns. They are remarkable for their great speed and the immense bounds they frequently give on starting to run. The gazelles are represented by one species, the Indian gazelle or *chinkāra* (*Gazella Bennetti*). This pretty little antelope is found in scrub jungle and in ravines on the banks of rivers. The males have curved ringed horns about 12″ long and the females smooth conical horns which rarely exceed 5″. They seldom congregate in large herds, 3 or 4 being the usual number found together.

We now come to the *Cervidæ* or deer which are probably the most interesting family of animals found in these Provinces. The barking deer (*Cervulus muntjac*) is one of the commonest deer in the District, especially in Dhanwāhi and near Silondi and Khitoli. In appearance it is not unlike the European roe-deer. Its name is derived from its peculiar call which is singularly like that of a dog's bark. Its peculiarities are its long pedicels of 3″ or 4″ which are prolonged in a bony rib down the face. The horns have two points. The dentition is peculiar. The buck is armed with a mobile tusk on the upper jaw which is its chief weapon of offence and with which it can inflict severe wounds. The sāmbhar (*Cervus unicolor*) is the largest and most universally distributed of Indian deer. It is found in all the dense forests of the District, especially in hilly areas. In colour it is a uniform dark brown, the ears are exceptionally large and the hair is peculiarly coarse. A good stag stands 14 hands at the shoulder and weighs upwards of 600 lbs. The horns are 6 pointed and vary greatly, but the largest size weigh about 20 lbs. the pair and are about 45″ long. This deer is the most nocturnal of all the deer and may be present in fair numbers in a particular locality without its presence being evident. It prefers dense forest and is found on the highest ground of the particular locality it inhabits. It both grazes and browses. The rut takes place in December and is singularly short of duration. During this period only are the master stags found with the herd, which seldom exceeds 15 animals. The horns drop in April. They have a number of cries and although so nocturnal in their habits are nevertheless a most interesting deer to study. The *chītal* or spotted deer (*Cervus axis*) is the most beautiful of all the deer found in India. The skin is rufous fawn with white spots arranged in lines; a dark stripe runs along the back, flanked by a row of white spots. The horns are long and gracefully set on, which combined with the natural grace of carriage and mien possessed by this deer, render it one of the most beautiful examples of animal life in the world. A stag stands 36″ at the shoulder and weighs 200 lbs. A good horn measures 35″; there are six points but old stags commonly have several small accessory points. It is not common in the District but is

found in all forest where there is a plentiful supply of water throughout the year, this apparently being the one indispensable condition. The young are born at all seasons but the rut proper takes place in April and May. Stags may be found in horn at all seasons but the majority are in velvet from September to January. There only remains to mention the mouse deer (*Tragulus meminua*) which is not common but has been seen at Khitoli and Dhanwāhi. On account of its retiring habits it is seldom met with. This charming little animal only stands about 10″ at the shoulder and weighs about 4½ lbs. The colouring is very similar to that of the Indian squirrel. There are no horns but the bucks are armed with sharp tushes in the upper jaw which point downwards. The animal frequents burrows and rocks and feeds on fallen fruits. The young are born in April and May, one or two at a time. It is easily tamed and makes a good pet.

The Indian wild boar (*Sus cristatus*) is very common. It frequents both forest and cultivated lands; in the latter a certain amount of cover and permanent water-supply are a *sine quâ non*. In appearance the animal is similar to the wild boar of Europe. This animal is possessed of a high degree of intelligence and in point of courage yields the palm to no wild animal in these Provinces. It is gregarious and sometimes congregates into sounders of as many as 60 or 70 individuals. Old boars are often single or in pairs. Young may be found at all seasons but the rut proper takes place in April; the period of gestation is 4 months. The mother constructs a small hut or shelter of grass or bamboo for her young. The materials are laid in a circular heap, the mother creeping under and prising it up, when it often maintains an erect position. Their food consists of roots, fruits and crops and garbage, even meat, as pigs have been observed to devour a dead buffalo which had been freshly killed by a tiger. On rideable ground the boar affords the finest sport in India. Animals of 35″ in height and over 340 lbs. have been speared and it is probable that the forest dwelling boars attain an even greater size. The tushes rarely exceed 9″.

Crocodiles and Snakes.

12. Crocodile (*Crocodilus pelustris*) is found in all the large rivers, and in many large tanks. Turtles occur in the Nerbudda. Of snakes the commonest are the black variety of cobra (*Naja*

tripudians), *garethā* or *karait*, both varieties of the black-banded snake (*Bungarus fasciatus* and *B. Cerullius*), the *dhāman* or rat snake (*Ptyas mucosus*) and the water snake often miscalled *dhāman*, both of which latter species are non-poisonous. Of vipers the Russell's viper (*Vipera Russellii*) is the principal. It is as poisonous as a cobra but more dangerous on account of its sluggish habits, which prevent it moving away quietly on the approach of a man, and also on account of its fangs, which are the same size as those of a cobra and will pass through thick layers of clothing. One species of small green viper frequenting trees and another of a thin long brown type have been observed but not identified. *Echis carinata* occurs, as one specimen was obtained lately in the town of Jubbulpore.

Birds.

13. No birds appear to be peculiar to the District. Among the brighter coloured birds the roller (*Coracias indica*), frequently called erroneously the blue jay, and the golden oriole (*Oriolus kundoo*) are familiar objects everywhere. The *koel* (*Eudynamis honorata*), commonly known as the hot-weather or brain-fever bird, and the coppersmith (*Xantholæma hæmatocephala*) are more familiar to the ear than to the eye. Among the smaller birds the beautiful purple sun bird (*Arachnechthra Asiatica*) may often be seen in gardens flitting from flower to flower like a humming bird, for which it is sometimes mistaken by those who are unaware that the latter does not occur in India. Several woodpeckers are found, specially in the forest tracts, and the beautiful golden backed species is familiar even in the cantonment of Jubbulpore. The common grey hornbill (*Lophoceros birostris*) is not uncommon in suitable spots and several are generally to be seen near Panāgar. Among the plovers the red wattled lapwing (*Sarcogrammus indicus*), usually called the 'Did he do it,' is by far the commonest. A specimen of the sociable lapwing (*Chettusia gregaria*), which does not often occur so far to the south-east, was recently shot near Jubbulpore. At least one kind of green pigeon (*Crocopus Chlorigaster*) is found, and may generally be seen feeding on the ripe fruit of the pipal (*Ficus religiosa*) at the proper season. The only crane that occurs in any numbers is the *sāras* (*Grus antigone*) whose harsh voice is a familiar sound in the cold weather.

A small flock of the demoiselle crane (*Anthropoides Virgo*) has been met with near Jubbulpore, but the species does not appear to be at all common here. Curlews (*Numenius arquata*) are not at all uncommon during October and November, and various kinds of migratory waders are of course found in suitable places during the whole of the cold weather. Only one species of sandgrouse (*Pteroclurus exustus*) has been observed ; they are most frequently met with to the south-east of Jubbulpore, where the ground is suitable to their habits. Peafowl (*Pavo cristatus*), jungle fowl (*Gallus Sonneratii*) and one or more kinds of spur fowl occur in the jungles. The grey quail (*Coturnix communis*) is not uncommon during the cold weather and the black breasted or rain quail (*Coturnix coromandelicus*) breeds in the District. Several species of bush, button and bustard quail are common ; the latter species, besides having only three toes, is most peculiar in its nesting habits, as the male sits on the eggs, while the female gives battle to any others of her sex that may appear in the vicinity of the nest. The painted partridge (*Francolinus pictus*) and the grey partridge (*Francolinus pondicerinus*) afford some sport, but the cover in this District is usually too thick for large bags to be obtained. Snipe (*Gallinago coelestis* and *stenura*) appear in some numbers towards the end of September ; jack snipe (*Gallinago gallinula*) arrive somewhat later, while the painted snipe (*Rostratina capensis*) is of course a resident species. Geese are not common, and so far as is known only one species (*Anser indicus*) occurs. Several kinds of duck breed in the District, the commonest being the whistling teal (*Dendrocycna javanica*) and the cotton teal (*Nettopus coromandelianus*). With the cold weather large numbers of migratory duck and teal arrive, many of which stop in the District the whole season, though some appear merely to make it a halting place on their passage further south. The common teal (*Nettium crecca*) and the garganey (*Querquedula circia*) are among the earliest arrivals, and the former is perhaps the commonest duck found here, though it must be almost equalled in numbers by the pochard (*Myroca ferina*) which is to be found on almost every tank from October to March. In addition to the above may be

mentioned the common blue rock pigeon, the ring dove, the turtle dove, and the pink breasted dove, the large green parrot, which occurs in some hilly forests and is rather rare, the small peach-headed parrot, and the common green parrot, the *bulbul*, king crow, and a species of small swallow which visits the District during the winter season. Of the common birds of prey may be mentioned the lesser-crested grey-breasted eagle, the buzzard, the kite-hawk, grey-hawk, brown-hawk and the sparrow-hawk, the common kite and the Brahmani kite. Of carrion feeders the black and the brown vultures are common, as is also the common crow. Of nocturnal birds may be mentioned the common owl, the lesser white breasted owl, and the small owl.

Fishes.

14. Mahseer (*Barbus tor*) are found in the Nerbudda, Gaur, Hiran, Mahānadī and some hill streams. *Murrel* or *sāwal* (*Ophiocephalus striatus*) are also found in these rivers. *Rohn* (*Labeo rohita*) is found in the Nerbudda. *Magurā* (*Clarias magur*) and *singan* (*Saccobranchus fossitis*) are found in many tanks and are very nourishing as food. *Chilwā* or *chehlā* (*Aspidophoria morar*) and *tengrā* (*Macrones vittatus*), small fishes, are common in all the streams. *El* or *bām* is met with in all rivers.

Deaths caused by wild animals.

15. During the seventeen years ending 1907 about 13 tigers and 21 panthers were destroyed annually on an average and the total amount paid in Government rewards for their destruction was Rs. 17,926. During the same period a total of 315 persons and 28,798 cattle were killed by wild animals. The panther is much the most destructive animal both to man and beast, his victims numbering 71 persons and 19,745 cattle; the tiger was responsible for the deaths of 33 persons and 6,280 cattle, and the wolf for those of 29 persons and 217 cattle. The number of persons dying from snake-bite was 1,535 or nearly five times as many as those killed by wild animals. The recorded mortality among cattle by snake-bite is not large, being only 469 during the period, or nearly 28 annually on an average.

RAINFALL AND CLIMATE.

Rainfall.[1]

16. Rainfall is registered in this District at each of the tahsil headquarters, Jubbulpore, Murwāra and Sihorā. Rainfall is also registered at Bijerāghogarh and at the Water Works Reservoir at Jubbulpore, but statistics for these two stations are not available for so long a period as for the tahsīls. The average rainfall at Bijerāghogarh for the eight years ending 1907-08 was 41·97 inches and at the Water Works Reservoir for the 24 years ending 1907-08 was 59·38 inches. For the 41 years ending 1907-08 the mean District average rainfall was 49·50 inches. The average rainfall during the same period at each of the tahsīl stations was Jubbulpore 56·65, Murwāra 47·25 and Sihorā 46·94 inches. The rainfall thus decreases towards the north. The maximum rainfall for the District as a whole was 80·60 inches in 1884-85 and the minimum 13·39 inches in 1868-69. In this latter year the *kharīf* crops completely failed and this led to severe scarcity which necessitated the opening of famine relief works. The maximum and minimum falls respectively were at Jubbulpore 98·01 inches in 1884-85, 26·89 inches in 1868-69, at Murwāra 72·72 in 1884-85, 22·56 in 1877-78 and at Sihorā 71·87 in 1893-94, 13·28 in 1868-69. The rainfall in the District as a whole has exceeded 50 inches in 20 out of 41 years and has been below 40 inches in 6 years out of the same period. It was above 50 inches in 27 years and below 40 inches in 5 years at Jubbulpore; in Murwāra in 13 years above 50 and in 9 years below 40, while in Sihorā it was in 16 years above 50 inches and in 14 years below 40 inches. As a rule June receives 7·38 inches, July 17·59 inches, August 14·38 inches, September 6·79 inches, and October 1·60 inches, the total for these 5 monsoon months being 47·69 inches. The average during the dry months is 2·74 inches. Though wheat is extensively cultivated in the Jubbulpore District, yet unlike other wheat Districts there is a large area especially in the Murwāra tahsīl under broadcasted rice and some under transplanted rice. This is no doubt due to the excellent monsoon rainfall received which compares very favourably

[1] The figures in this note have been taken from the Irrigation rainfall returns and the Central Provinces Gazettes.

with that of the broadcasted rice Districts of Chhattisgarh. With such marked variations in the character of the country, it is seldom that the rainfall of a single year will suit every kind of land and crop. More depends on the timely distribution of the rain than on its amount. What is required is copious rain in the early monsoon, good rain in September, moderate showers in October and a few showers in December or January, with bright cold weather and dews in the winter months. These are the ideal conditions which, if seasonable intervals occur, ensure good crops in both seasons. Drought in September and October will prove disastrous to the autumn crop, though with subsequent showers the spring or *rabi* crop may succeed. On the other hand excessive rain in these months will not do much damage to the *kharīf* crops, but will prepare the way for damage to the *rabi* crops, and if this be followed by further rain in November and the cold weather months, the loss will be very heavy indeed from rust. Again, if the months of September and October are dry, and there is no cold weather rain, these crops will suffer intensely from drought. In the Haveli however the latter contingency is guarded against to some extent by the *banding* of the fields whereby the early rainfall is stored till October and then run off. In this way the necessity for about 4 inches of rain in October is obviated and the soil is kept sufficiently moist for the crops to mature even without further rain. The District is not infrequently visited by hailstorms which are very destructive. Frost also has often caused widespread damage and hardly a year passes, but that the bitter north-east wind (*tusār*) destroys early sowings in one portion of the District or another.

Temperature and climate.

17. An observatory was established in the District on the 1st January 1869 at an elevation of 1337 feet, which was subsequently altered to 1327 in 1881. The following statement shows the average temperatures recorded :—

	Average maximum.	Average minimum.	Absolute maximum.	Absolute minimum.
January	77·6°	48·0°	90·3°	34·4°
May	105·6°	78·9°	113·0°	63·8°
July	85·9°	74·6°	107·0°	69·6°

The highest maximum temperature recorded in the District was 114·8° on 2nd June 1889 and the lowest minimum was

32·3° on 24th December 1878. The climate for the most part of the year is pleasant and salubrious, and Jubbulpore is generally looked upon as one of the most desirable stations in the Province. The hot weather commences usually about the middle of March and lasts until the end of June. The heat is not so intense as that of Northern India; the hot winds are not so continuous and strong and the nights are comparatively cool. The monsoon was formerly expected to burst shortly after the middle of June, but the experience of recent years is that the monsoon winds begin to blow early in June and the rains arrive in July and continue until the latter half of September. The cold weather is a delightful season. 'The climate[1] in the cold season, 'that is from November to March, is almost perfect for the 'life of combined outdoor exercise and indoor occupation 'which forms the healthiest sort of existence in India. The 'midday sun, if a little hot for hard work in the open air, is 'just sufficient to make the temperature under canvas de-'lightful, while the mornings and evenings are cool and 'bracing, and the nights cold enough to make several blan-'kets a necessity. In January, ice will generally be found 'on water that has been exposed all night. Nothing can, 'in my opinion, exceed the exhilarating effect of a march at 'such a season, with pleasant companions, through a country 'teeming with interest in its scenery, its people, and its 'natural productions, such as is this region of the Nerbudda 'valley.' The unhealthy season is from the middle of the rains until early in the cold weather when fevers and dysenetry are prevalent.

---

1 Forsyth's Highlands of Central India, page 49.

CHAPTER II.

HISTORY AND ARCHÆOLOGY.

History.

Asoka Edict.

18. The rock edict of Rūpnāth in the Sihorā tahsil constitutes the earliest landmark of authentic history of the District and carries it back to the third century B. C., to the reign of Asoka, one of the greatest emperors of India. He ascended the throne about 272 B. C. not without bloodshed, including the death of his elder brother who opposed him. In his early years he is believed to have been a Brahmanical Hindu, specially devoted to Siva, a god whose consort delights in bloody sacrifices and he appears to have had no scruples about the shedding of blood. But the one aggressive war, which he waged in his life, with the country of Kalinga along the coast of the Bay of Bengal in 261 B. C., filled him with deep remorse and pity. These feelings crystallized into a steadfast resolve that never again should ambition lead him to inflict such grievous wrongs upon his fellow creatures. He acted up to the principles which he professed. About this time he came under the influence of Buddhist teaching, his devotion to which increased more and more as the years rolled on. The chiefest conquest he declared was that won by the Law of Piety and he begged his descendants to rid themselves of the popular notion that conquest by arms was the duty of kings; and if they should find themselves engaged in warfare, he reminded them that they might still find pleasure in patience and gentleness and should regard as the only true conquest that which is effected through the Law of Piety. In the Rūpnāth Edict, 'the beloved of the gods' as he is styled in these records speaketh thus:—'It is more than thirty-two years and a half that I am a hearer of the Law and I did not exert myself strenuously but it is a year and more that I have entered the community of monks and that I have exerted myself strenuously. Those gods who during this time were considered to be true gods in Jambu-



dwipa have now been abjured. Through exertion comes the reward and it cannot be obtained by greatness. Even a lowly man who exerts himself may attain heaven high though it is. And for this same purpose this precept has been inculcated. Let both the lowly, and those who are exalted exert themselves and in the end gain true knowledge and this manner of acting should be of long duration.'[1]

The record finally ends with a date stating that 256 years had then elapsed since the departure of the Teacher, that is Buddha, which shows that it must have been engraved about the year 232 B. C. very shortly before the emperor's death.

19. The Maurya dynasty to which Asoka belonged came to an end about 184 B. C. when Pushyamitra, the Commander-in-Chief, having slain his master, usurped the vacant throne and founded a dynasty known to history as that of the Sungas. The capital continued to be, as of old, Pātliputra (Patnā) and probably all the central or home provinces of the empire recognised the usurper's authority, which extended to the south as far as the Narmadā (Nerbudda) river, which flows through this District. It was in the time of this usurper that the Greek king Menander invaded India but was repelled after a severe struggle. This dynasty ruled for 112 years and came to an unhonoured end about 72 B. C. when the tenth and the last king who was a man of licentious habits lost his life in a discreditable intrigue. The plot which cost the royal debauchee his throne and life was contrived by his Brāhman minister, who seized the throne rendered vacant by his crime.

The Sunga dynasty.[2]

20. He and his three successors ruled only for 45 years when the last of them was slain in 27 B. C. by a king of the Andhra or Sātavāhana dynasty which at that time possessed wide dominions stretching across the table-land of the Deccan from sea to sea. This dynasty ruled for about four centuries

The Andhra dynasty.

---

[1] From Dr. Bühler's translation as given in Corpus Inscriptionum Indicarum, Vol. I, with emendations subsequently made.

[2] The account from here down to the Gupta dynasty is principally taken from Smith's Early History of India, 1908.

and a half ending in about 236 A. D. None of these dynasties from Sunga downwards have left any records or marks of their rule in the District. The end of the Andhras is wrapt up in darkness. In fact, as Mr. Smith remarks, 'the third century A.D. is one of the dark spaces in the spectrum of Indian history and almost every event of that time is concealed from view by an impenetrable veil of oblivion.'

The Gupta dynasty.

21. In the fourth century light again dawns, and the veil of oblivion is uplifted. In 308 A. D. a local Rājā at or near Pātaliputra bearing the famous name of Chandragupta wedded a Nepāl princess who belonged to the ancient Lichchhavi clan of Rājputs who were celebrated ages before in the early annals of Buddhism. This event proved of the highest political importance as being the foundation of the fortunes of a dynasty destined to rival the glories of the Mauryas. The lady evidently brought to her husband as her dowry valuable influence, which in the course of a few years secured to him a paramount position in Magadha (the modern Behār) and the neighbouring countries. He was raised by his Lichchhavi connexion from the rank of a local chief to such dignity that he felt justified in assuming the lofty title of 'Sovereign of Mahārājas', usually associated with a claim to the rank of Lord paramount. His political importance was sufficient to warrant him in establishing, after the oriental manner, a new era dating from his formal consecration or coronation, *viz.*, 26th February 320 A.D. Before his death which occurred 5 or 6 years later Chandragupta selected as his successor the Crown-prince Samudragupta who justified the paternal preference by displaying a degree of skill in the arts of both peace and war which entitles him to high rank among the most illustrious sovereigns of India. From the moment of his accession Samudragupta assumed the part of an aggressively ambitious monarch resolved to increase his dominions at the expense of his neighbours. This Indian Napoleon first turned his arms against the powers nearest him and thoroughly subjugated the Rājās of the Gangetic plain, the wide region now known as Hindustān, before he embarked on his perilous adventure in the remote south, a task which demanded uncommon boldness in design

and masterly powers of organization and execution. The invader marching due south directed his first attack against south Kosala in the valley of the Mahānadī and then subdued all the chiefs of the forest countries included in Orissa and the Central Provinces. In his Allahābād pillar inscription he mentions that he captured and then liberated many kings, and that his imperious commands were fully gratified by the tributes and obeisance of various tribes, of whom the Kharaparikas deserve special notice here. Mr. Smith thinks that this tribe may have occupied Seonī or Mandlā District,[1] but recently an inscription was found in Batihāgarh in the Damoh District which mentions 'Kharpara armies'. It therefore appears that Samudragupta's Kharparikas lived somewhere in Damoh and Jubbulpore, places which adjoin the Districts independently localised by Mr. Smith.

The Parivrjaka Mahārājas.

22. At the time of this conquest, Jubbulpore was apparently included in the dominions of a feudatory of the Guptas, known as the Parivrājaka Mahārāja who lived somewhere near Bijerāghogarh in the Murwāra tahsīl. Some six inscriptions of these kings have been found dated in the Gupta era between 475 and 528 A.D. In one which was found in the possession of the mālguzār of Betūl 2 villages Prastarvātaka and Dwārvatikā situated in the province of Tripurī are mentioned and these have been identified[2] with Patparā and Dwāra near Bilahri in the Murwāra tahsīl. Tripurī is well known as being the capital of the Kalachuri kings at a later date and is now represented by the village Tewar six miles from Jubbulpore. Apparently the surrounding country also went by the name of the capital.

On the borders of Bijerāghogarh another family of Uchchakalpa Mahārājas connected chronologically and territorially with the Parivrājaka Mahārājas also ruled and there is little doubt that some portion of the present Jubbulpore District was under their sway. The Parivrājakas acknowledged the sovereignty of the Guptas as is evidenced from the use of the Gupta era in their records, though the latter's power had much declined owing to the incursions of

---

[1] J. R. A. S. 1897, page 893.

[2] See Epi. Indica, Volume VIII.

the white Huns who had effected an alarming raid into the eastern provinces of the Roman empire during the reign of Theodosius between A.D 430 and 440 but having been obliged to retire before the Persian army had overrun Hindustān. A confusion followed in which the local chiefs apparently became independent though retaining allegiance to the nominal paramount power in conformity with the instinctive characteristics of the Indian rulers of which examples may be still traced in the respect paid to a descendant of a quondam line of sovereign lords having no longer any status, even by chiefs enjoying feudatory powers. That the Huns' raid extended to this province is clear from an inscription found in the Saugor District. The Huns were however driven away by about 528 A.D. when there is clear proof that Jubbulpore was under the Parivrājakas, as the Betūl plate which mentions Tripurī is dated 518 A.D. and belongs to the reign of Samkshobha. Another plate of the same reign, dated in 528 A.D., was found in Khoh near Bijerāghogarh. How much longer this dynasty continued to flourish, there is no evidence to show, but so far as our present knowledge goes it appears that it may have lasted till the beginning of the 7th century. In 1908 a copper plate dated explicitly in the Gupta era corresponding to 601 A.D. was found at Arang in the Raipur District disclosing the existence of another feudatory of the Guptas. Raipur is further away from the Gupta capital at Patnā than Jubbulpore, which therefore may have formed part of the Gupta dominion. This is however not a very safe conclusion, inasmuch as the Uchchakalpa Mahārājas who were apparently feudatories of the Kalachuris lived quite close to the Parivrājakas and must have begun to undermine their neighbour's power, when they found their Sovereign Lord in a weak position.

The Kalachuri era.

23. The exact date of the Kalachuris' advent to the District is not known. The Jubbulpore country was known as Dāhal and is mentioned as such by Al Beruni[1] the Arabic geographer, in the 11th century A.D. In the records of the Parivrājaka Mahārājas it is called the Dabhālā kingdom. When the Kalachuris rose to power, it apparently became a

[1] Sachan's Al Beruni's India, Vol. II., p. 202.

part of the Chedi country. The kings of Chedi find a mention even in the Mahābhārat. There can be little doubt that this dynasty of kings was in ancient days a powerful one. They had their own era called the Kalachuri or Chedi era which began on the 5th September 248 A.D. What great event this commemorates or how the era originated is not clearly known. Dr. Bhagwān Lāl Indrajī propounded the following theory which Dr. Bhandārkar says adapts itself so well to all the circumstances that have to be accounted for, that it might be accepted as furnishing in all probability the true explanation of them. 'In the early centuries A. D. there were certain kings in Western India holding Gujarāt and the adjacent provinces, who used the Saka era. Certain coins show that their rule was interrupted by an invader who established another era. This invader was a certain Ishvardatta whose coins are dated not in an already existing era, but in the 1st and 2nd years of his reign. He belonged to the dynasty of the Abhīra caste of which records are found in the Nāsik cave and which probably came by sea from Sindh, conquered the Western coast and made Trikūta its capital. When he had consolidated his power he began to issue his own coins, copying those of his predecessors, the last of whom appears to have ceased to reign in 170 Saka year = 248 A.D. Ishvardatta's conquest thus falls at just the same time with the foundation of the Kalachuri era. And we may thus conclude that Ishvardatta was a founder of an era which was first known as the Traikūtaka era and only in later times came to be called the Kalachuri or Chedi era.' Dr. Bhagwān Lāl held that the former family having afterwards restored their power, the invaders were driven out of the country and the Traikūtakas then retired to Central India and there assumed the names of Haihaya and Kalachuri. But the latter once more regained possession of their former capital Trikūta about the middle of the 5th century.

The Kalachuri capital.

24. The earliest mention of the Kalachuri kings in the inscriptions is that of Buddharāja in 580 A.D. It appears that the proper Chedi country was not identical with the Jubbulpore country. The latter was afterwards included in it, and it has been already shown that Dabhālā remained under the

Parivrājakas in the 5th and 6th centuries. With the decline of the Gupta empire, the Parivrājakas sooner or later must have succumbed to the Kalachuris whose allies the Uchchakalpa Mahārājas were living quite close to them. The Kalachuris seem to have had their capital then at Tritasaurya which has not been yet identified. From the inscriptions found in these provinces it appears that Tripuri or Tewar was made the capital of these kings about the year 900 A.D. Most of the inscriptions found in the Jubbulpore District and in Chhattisgarh begin with Kokalla I whose date has been fixed about 875 A.D. The Kalachuri kings appear to have ruled the Jubbulpore country from Tewar for at least 300 years.

The Kalachuri kings.

25. The following is the list of kings made out from inscriptions carved by them and from references made in the records of other kings :—

	A.D.
(1) Kokalla I	875
(2) Mugdhatunga Prasiddhadhavala, son of (1) ...	900
(3) Bālāharsha, son of (2)	
(4) Keyuravarsha Yuvarājadeva I, son of (2) ...	925
(5) Lakshmanarāja, son of (4)	950
(6) Sankaraganadeva, son of (5)	970
(7) Yuvarājadeva II, son of (5)	975
(8) Kokkalladeva II, son of (7)	1000
(9) Gāngeyadeva-Vikramāditya, son of (8) ...	1038
(10) Karnadeva, son of (9)	1042
(11) Yashahkarnadeva, son of (10)	1122
(12) Gayākarnadeva, son of (11)	1151
(13) Narasimhadeva, son of (12)	1155
(14) Jayasimhadeva, son of (12)	1177
(15) Vijayasimhadeva, son of (14)	1180

Kokalla I.

26. The inscriptions hitherto found in which Kokalla I's name appears are three in number, two of which are dated in the Kalachuri years 793 and 866 corresponding to 1041 and 1114 A.D. and the third is undated. From these we learn that in the lunar race was born Kārtavīrya, the vanquisher of the demon Rāvana.[1] Of his race was Haihaya from whom were born

[1] Epi. Ind. Volume II, page 300.

the Haihayas, the clan which was rendered illustrious by the valourous and pious prince Kokalla. The hand of this prince granted freedom from fear to Bhoja of Kanauj in the north, to the Rāshtrakūta king Krishna II, who married one of his daughters, in the south, to the illustrious Chandella king Harsha, the sovereign of Chitrakūta and to the king Sankaragana, one of his own younger sons. According to the Ratanpur[1] inscription he had 18 sons, one of whom became the ruler of Tripurī and the rest lords of *mandalas*, and it is not improbable that Kokalla assigned parts of his dominions to some of his younger sons in his own lifetime.

The kings of the 10th century.

27. Kokalla I was succeeded by his son Mugdhatunga, also known as Prasiddhadhavala, born of the Chandella lady Nattadevi. This prince was apparently the first king of Tripurī or Tewar. He is stated to have conquered the lines of country by the shore of the eastern sea and took Pāli from the lord of Kosala. This king had two sons who ruled one after another, Bālāharsha and Keyūravarsha known also as Yuvarājadeva. The latter was engaged in many successful wars with different nations, but on the other hand an inscription of the Chandella king Yashovarman informs us that he defeated and 'brought distress on the shameful Chedis.' The next king Lakshmanarāja is stated to have defeated the lord of Kosala and undertook an expedition to the very pleasant western region in the course of which he bathed in the sea and worshipped the god Someshwara in Gujarāt. His daughter Bonthadevi became the mother of the renowned Tailapa of the western Chalūkya dynasty, which he once more restored to its former greatness. Lakshmanarāja was succeeded by his son Shankaragana first and then by his younger son Yuvarāja II. According to the Udayapur prashasti Yuvarāja was defeated and his capital Tripuri conquered by Vākpati Munja of Mālwā. This latter king after having defeated Tailapa 16 times failed in the 17th attack and was defeated, captured and executed. Tailapa, who was the nephew of Yuvarāja II, seems to have also invaded the latter's country and to have humbled him.

---

[1] Epi. Ind. Vol. I. p. 32.

Gāngeyadeva.

28. Yuvarāja II was succeeded by his son Kokalladeva II and he by his son Gāngeyadeva. The latter according to the Jubbulpore copper plate [1] bore also the name of Vikramāditya. He was a great king and several inscriptions eulogize both his valour and piety, and even in a Chandella record he is styled the conqueror of the universe. Able and ambitious as he was, he seems to have aimed at attaining the position of paramount power in Upper India. In 1019 his suzerainty is supposed to have been recognised in distant Tirhut. He struck gold coins and it is somewhat curious to observe that out of 15 kings whose names are known as enumerated above coins have been found of Gāngeyadeva alone. He seems to have also struck silver and copper coins, but they are very rare. Gāngeya is mentioned as the ruler of Dāhal by the Arabic geographer Al Beruni in A.D. 1030. His reign ended about 1040 A. D. He was fond of residing at the foot of the holy fig tree of Prayāga (Allahābād) and eventually found salvation there together with his 100 wives.

Karnadeva.

29. Gāngeyadeva was succeeded by his son Karnadeva who founded the town of Karnāvati, the present Karanbel close to Tewar. At Kāshi or Benāres he built a splendid temple called Karna's Meru. The Bherāghāt inscription of Alhanādevi [2] represents him as having subdued or held in check the Pāndyas, Muralas, Kungas, Vangas, Kalingas, Kīras and Hūnas; and similarly the Karanbel inscription of Jayasimhadeva represents him as being waited upon by the Choda, Kunga, Hūna, Gauda, Gurjara and Kīra princes. As we possess an inscription of his son which is dated eighty-one years later than his own copper-plate, it is clear that Karna's reign was a long one; and it is certain that he was engaged in many wars and that his power for a time was severely felt by his neighbours. In 1060 A.D. he joined Bhīma, king of Gujarat, in crushing Bhoja, the erudite king of Mālwā. Acçording to the Nāgpur prashasti Udayāditya of Mālwā, whom we know to have ruled in A.D. 1080, freed the land from the dominion of Karna, who joined by the Karnātas had swept over the earth like a mighty ocean; and the great achieve-

[1] Epigraphia Indica, Volume II, page 6.

[2] Ep. Ind. Volume II, page 44.

ment which the Chandella inscriptions report of Kirtivarman, and which has even been recorded in a well-known Sanskrit play, is that that prince defeated Karna, the favourite of Fortune, and by doing so restored the independence of the Chandella kingdom. It was at this time it appears that Bilahri in the Murwāra tahsil was ceded to the Chandellas and there is reason to believe that the town continued in their possession for about a hundred years. The Chandellas seem to have made such an impression on the people that the numerous old temples found in the northern portion of the District are all ascribed to them, in spite of the inscriptional records showing that they were built during the times of the Kalachuris and their predecessors.

Decline of the Kalachuris.

30. Karnadeva married the Huna princess Avalladevi and was succeeded by the son whom she bore to him Yashahkarnadeva, whose Jubbulpore [1] copper-plate grant must have been issued in A.D. 1122 shortly before the close of his reign. Yashahkarnadeva's name also occurs in a copper-plate inscription of Govindchandradeva of Kanauj of the Vikrama year 1177 = A.D. 1120 by which the latter sanctions the transfer of some land which had been originally granted by the former; thereby proving that during the reign of Yashahkarna part of the Chedi dominions had passed into the possession of the kings of Kanauj. A successful expedition against Tripuri by Lakshmadeva of Mālwā, the son and successor of Udayāditya, which probably took place during Yashahkarna's reign, is mentioned in the Nāgpur prashasti. The only exploit which Yashahkarna's own inscription has to record of him, is that he 'extirpated with ease' the ruler of Andhra near the river Godāvari, and the Bherāghat inscription of Alhanādevi speaks of the devastation by Yashahkarna of Champāranya; the latter place has not been yet satisfactorily identified but near Rājim in the Raipur District there is a place called Champājhar which is taken to be Champāranya by the followers of Vallabhācharya, [2] who is said to have been born there. Yashahkarnadeva was succeeded by his son Gayākarnadeva, of whose reign we possess an inscription dated in the Chedi

[1] Ind. Ant. 1908, page 144.

[2] He was the founder of a Hindu sect which goes after his name.

years 902 = A.D. 1151, when his son Narasimha had already been appointed heir-apparent. Gayākarna married Alhanādevi, a daughter of the king Vijayasimha of the Guhila family of Mewād, and bore to him two sons Narasimhadeva and Jayasimhadeva, who succeeded their father one after the other. Of Narasimhadeva's reign we possess three inscriptions dated in the Chedi years 907 and 909 = A.D. 1155 and 1158, and in the Vikrama year 1216 = A. D. 1159 and of Jayasimhadeva's reign three inscriptions have been edited, two of which are dated in the Chedi year 926 and 928 = A.D. 1175 and 1177. Jayasimhadeva married Gosaladevi, who has given her name to the Gosalpur village and was succeeded by their son Vijayasimhadeva of whose reign we have two copper-plate inscriptions of the Chedi year 932 = A.D. 1180, and the Vikrama year 1253 = A.D. 1196 the first of which gives us the name of Vijayasimha's son, the prince Ajayasimhadeva. Of all these princes the inscriptions mention not a single fact which would be worth noticing here. Here ends the authentic history of the Tripurī Kalachuris and there is no record how and by whom they were replaced.

The title of Trikalingādhipati.

31. The inscriptions show that Karnadeva was the first to whom the title of Trikalingādhipati or the Lord of the Trikalinga (Telangāna) was applied and this continued to be enjoyed by his successors until the times of Vijayasimha. If therefore the Kalachuri rule in Jubbulpore ended with him it would mean a sudden collapse. We know however that the same title was adopted by the Cuttack kings about the tenth centure A.D. It therefore appears that the kingdom of Trikalinga was really ruled by the Cuttack kings who lived quite close to it, but the Tripurī Kalachuris continued to retain the title which Karnadeva had won for himself. Thus it would appear that in spite of their grandiloquent titles the Kalachuri power had much declined by the close of the 12th century and the disruption was not as sudden as it appears to be. The Ponwārs of Mālwā, the Parihârs of Nagode, the Chandellas of Bundelkhand and the Chālukyas of the south had already weakened it. The Parihârs and then the Chandellas had sliced off a portion of the kingdom and settled at Bilahrī. Indeed the Chandella

Madan Varmā who reigned between 1128 and 1165 included in his dominions the fortress of Singorgarh which was only a few miles from the Kalachuri capital ; the Rewah possessions seem to have been taken away by the Baghelās who came from Gujarāt, while the aboriginal chiefs did not miss the favourable opportunity which offered itself to them. They declared themselves independent and replaced the Kalachuris as soon as they found themselves sufficiently strong.

Rise of the Gonds.

32. These aborigines were Gonds who are still found in very large numbers in the adjoining District of Mandlā, which is full of forests forming a congenial habitat for the tribe. Their inspiring genius seems to have been a person named Jādurai, the son of a patel living near the Godāvari river,[1] who apparently took service with the reigning Kalachuri king and after ascertaining his weak points left his service and marrying the daughter of a Gond local chief Nāgdeo enlisted the Gonds of Mandlā on his side and became their chief on the death of his father-in-law. He took one Surbhī Pāthak as his minister who was apparently a dismissed office bearer of the Kalachuris. Both determined to overturn the power of their former master. They succeeded in their attempt. It seems that it was for Surbhī Pāthak's infidelity to his former master that Jādurai conferred on him the hereditary ministership so long as his own line lasted. If there is any grain of truth in the tradition recorded at length by Colonel Sleeman in the Bengal Society's Journal of 1837, page 621 *et seq.*, the only rational inference that could be drawn from it is what is stated above. Surbhī Pāthak's descendants, however, in order to invest their Gond masters with antiquity worked out a genealogy carrying Jādurai to 382 A.D. a period when the Haihayas or Kalachuris, under whom he is related to have taken service, had not commenced their rule in these provinces. The only inscription which the Gonds have left is that of Rāmnagar carved in the time of the Gond king Hirde Shāh and dated in the year 1667 A.D. This Hirde Shāh was according to the genealogy given therein 53rd in descent from Jādurai, showing that at least half the names inserted are fictitious.

[1] Some say Khāndesh.

33. Prior to Sangrām Shāh who became king about 1480 A.D. there were only 3 or 4 Districts in the possession of his predecessors.

Sangram Shah.

Sangrām Shāh extended them to 52 *garhs* or Districts, comprising Saugor, Damoh and possibly Bhopāl, the Nerbudda Valley and parts of the Sātpurā plateau. Some of the *garhs* he seems to have merely raided [1] and then included them in his list of possessions, though they continued to be ruled by their original masters. In spite of this he was the most illustrious prince of the Gond dynasty. He built the fortress of Chaurāgarh in Narsinghpur and the Sangrām Sāgar lake in the vicinity of Garhā. On its bank he constructed a temple called the Bājnā Math dedicated to the terrific god Bhairava.

34. He was succeeded by his son Dalpat Shāh who removed the seat of Government from Garhā to the fortress of Singorgarh, which is situated on the brow of a hill that commands a pass on the road about half way between Garhā and Saugor. Overtures had been made for a union between Dalpat Shāh and Durgāvati, the daughter of the Chandella Rājā of Mahobā, who was much celebrated for her singular beauty; but the proposal was rejected on the ground of a previous engagement and inferiority of caste on the part of the Garhā family. Dalpat Shāh was a man of uncommonly fine appearance, and this, added to the celebrity of his father's name and extent of his dominion, made Durgāvati as desirous as himself for the union; but he was by her given to understand, that she must be relinquished or taken by force, since the difference of caste would of itself be otherwise an insurmountable obstacle. He marched with all the troops he could assemble, met those of her father and his rival, gained a victory, and brought off Durgāvati. He died about four years after their marriage leaving a son Bir Nārāyan about three years of age, and his widow as regent during his minority; and of all the sovereigns of this dynasty she lives most in the page of history, and the grateful recollections of the people. She constructed the great reservoir close to Garhā, called after her Rānitāl and many

Durgāvati.

[1] Cunningham, Volume XVII, page 54.



Bemrose, Collo., Derby.

TEMPLE IN GARHA.

other highly useful works both about Garhā and at Mandlā where she kept her stud of elephants, which is said by Muhammadan historians to have amounted to fourteen hundred.

The Muhammadan invasion in Akbar's reign.

35. The first great blow to the Mandlā power took place in 1564 with the invasion of Asaf Khān, the Mughal Viceroy of Karā Mānikpur. At that time Durgāvati had been governing the kingdom for 15 years with great vigour and success on behalf of her minor son. His cupidity excited by the spectacle of these rich and prosperous territories administered only by a woman, and therefore seeming to promise easy conquest, Asaf Khān invaded the Mandlā kingdom without troubling much for a pretext. The queen met him near the fortress of Singorgarh in Damoh, and being defeated there, retired to a pass on the road to Mandlā, where, on seeing her troops again give way before the onset of the Mughal forces, she put an end to her own life by plunging a dagger into her breast. Her young son, Bīr Nārāyan, was taken to Chaurāgarh, but was followed by Asaf Khān, who laid siege to the castle and took it by storm. The young prince was trampled to death in the confusion, and the buildings were fired by the women under the fear that they would suffer dishonour if they fell into the enemy's hands. A sister of the queen and the betrothed wife of Bīr Nārāyan are said to have been the only two women who survived and to have been sent to the Emperor Akbar's harem. It is recorded that Asaf Khān obtained 101 cooking pots full of large and valuable gold coins, besides jewels, gold and silver plate, and images of the gods. Of all this booty, Asaf Khān presented to the king only a small part; and of a thousand elephants which he took, he sent to the king only three hundred indifferent animals and none of the jewels.[1] This invasion is remarkable as having probably opened out the valley for the first time to foreign immigration. Asaf Khān is stated to have held Garhā for some years as an independent principality, and there are various circumstances which indicate an

[1] Elliott's History of the Muhammadan period, Vol. VI, p. 121, and Briggs' Firishta II, p. 217.

incursion of northern settlers at the same epoch. Sleeman, writing in about 1825, said that 'Local tradition spoke of 'an intercourse with Delhi and a subjection, real or nominal, 'to its sovereigns from Akbar downwards,' but that no mention was ever made of any such connection in the period before Akbar's reign. He added that the oldest rupees found in the earth along the line of the Nerbudda were of the reign of Akbar. Asaf Khān's attempt at independence lasted for a few years only; he finally returned to his allegiance, was pardoned and restored to his government of Karā Mānikpur. In the list of Akbar's dominions given in the Ain-i-Akbari, Garhā appears as a division of the government of Mālwā. But the princes of Garhā Mandlā continued to maintain a practical independence, though the overlordship of the Mughal Emperor was from time to time recognised.

The Bundelā Invasion.

36. On Asaf Khān's departure Chandra Shāh, Dalpat's brother, was declared rājā of Garhā Mandlā but in recognition of his succession he was obliged to cede to Akbar the ten Districts which afterwards formed the principality of Bhopāl. Chandra Shāh was succeeded by his second son Madhukar Shāh, who treacherously put his elder brother to death, which act he finally expiated by voluntarily shutting up and burning himself in a dry hollow pīpal tree. He was the first prince to visit the Musalmān Emperor in his capital to pay his respects to him. His eldest son Prem Nārāyan had been in attendance upon the Emperor at Delhi, but he returned to the Nerbudda on receiving intelligence of his father's death, leaving his son Hirde Shāh to represent him at the Imperial Court. Unfortunately in his haste, he omitted it is said to return the visit of Bir Singh Deo, Rājā of Orchha, before he left Court; and that proud prince on his death bed shortly after is said to have made his son, Jhujhār Singh, swear to revenge the insult by the invasion and conquest of Garhā or perish. The latter soon after marched at the head of all the troops he could muster and Prem Nārāyan finding himself unable to oppose him in the field, threw himself into the fort of Chaurāgarh, where he was for some months closely besieged. Jhujhār prêtended at last to raise the siege. He drew off his troops and invited Prem Nārāyan to meet him

and treacherously caused him to be assassinated. He again invested the fort, which having no head soon surrendered; and all the other garrisons in the Garhā dominions followed the example. News of this invasion and of the death of his father was soon conveyed to Hirde Shāh, at Delhi, and he hastened back to his country and avenged his father by attacking and killing Jhujhār Singh. He received assistance in this action from the chief of Bhopāl, whom he duly rewarded by assigning the District of Opudgarh, containing three hundred villages.

Hirde Shāh.

37. Hirde Shāh now secure in the possession of his dominions turned his attention to the improvement of the country, which had suffered much from the ravages of war, and the internal disorders introduced by these revolutions of Government. He planted many groves. Among the former, the grove in which the cantonments of Jubbulpore now stand was the largest, and it is said to have contained, as its name Lakherī imports, one hundred thousand mango trees, a large number of which have gone to decay, or been cut down. Among the reservoirs that he formed, the largest was Gangā Sāgar, a fine piece of water in the vicinity of the town of Garhā. He died at a very advanced age after a reign of over seventy years. He was the only Gond prince who caused an inscription to be carved giving the genealogy of the Gond dynasty, which still exists at Rāmnagar in Mandlā.

Dissensions in the ruling family.

38. He was succeeded by his son Chattar Shāh who died after a reign of only seven years, and was succeeded by his son Kesari Singh; but his uncle Hari Singh tried to get himself proclaimed as successor to his brother and treacherously put his nephew to death after he had reigned three years. The people however proclaimed Kesari Singh's son Narind Shāh, then about seven years of age, as rightful sovereign, and collecting a strong force killed Hari Singh in an action, and drove his son Pahār Singh with all his troops from the field. Pahār Singh was a brave and enterprising man, and finding no prospect of making head against the young prince for the present he led off his followers, and joined the army of the Emperor Aurangzeb, then employed in the siege of Bījāpur, and served under the com-

mand of Diler Khān where he had frequent opportunities of distinguishing himself and the General was so much pleased with his services that after the fall of Bījāpur he sent with him a body of troops to assist in his attempts upon Mandlā. He was met by the young prince, his cousin, near the banks of the Dudhi river at Fatehpur, where an action took place in which Narind Shāh was defeated. In the meantime the Mughal forces having returned Narind Shāh proceeded to Sohāgpur where he again gave battle, when Pahār Singh was killed. His two sons who fled from the field endeavoured to secure the Mughal aid again but failed. They then hit upon the plan of changing their religion whereby they obtained the support of a small body of troops with which they returned to the valley of the Nerbudda and attacked Narind Shāh, but both of them were killed in the action. Narind Shāh's authority was now undisputed, but these frequent attempts of his relations cost him a great part of his dominions, as he was obliged to purchase the aid of neighbouring princes by territorial cessions. In this last contest with his cousins he was ably assisted by two Pathān feudatories, Azim Khān, who held in Jāgīr Bārha in Narsinghpur, and Lunde Khān, who held the District of Chauri (Seoni). Taking advantage of these disorders and of the weakness of their prince they attempted to establish an independent authority over all the territories south of the Nerbudda. The prince invited to his support the celebrated Bakht Buland, Rājā of Deogarh, and with their united force defeated the two Pathān rebels, and killed Lunde Khān at Seonī and Azim Khān near the village of Khulri in the Narsinghpur District. For this assistance Narind Shāh assigned to Bakht Buland the Districts of Chauri, Dongartāl and Ghunsaur. During these struggles he is said to have assigned to Chattar Sāl, Rājā of Bundelkhand, the five Districts of Garhpahrā, Damoh, Rehlī, Etāwā and Khimlāsa, which afterwards formed the province of Saugor. Two Districts, Pawai and Shāhnagar, had before been assigned to the chief of Bundelkhand. He was obliged to assign to the Emperor, it is said, for a recognition of his title, the five districts of Dhāmoni, Hattā, Mariādoh, Garhākotā and Shāhgarh. Narind Shāh died after a reign, it is said, of forty years in A.D. 1731 leaving to his son Maharāj Shāh only twenty-nine of the fifty-two Districts which had

composed the Garhā Mandlā dominions under his ancestor, Sangrām Shāh.

39. After a peaceful reign of eleven years, Maharāj Shāh's dominions were invaded by the Peshwā for the purpose of levying the tribute which it was impudently pretended that the Sātāra rājā had granted to him the right to levy in all the territories north of the river Nerbudda. Maharāj Shāh resisted his demand and stood a siege in the fort of Mandlā. It was soon taken and the prince put to death. He left two sons Seorāj Shāh and Nizām Shāh, and the eldest was put upon the throne by Bāji Rao Peshwā on condition that he should pay four lakhs of rupees a year as the *Chauth* or quarter of his public revenue in tribute. The revenue of the rājā in consequence of this invasion and the preceding contests for sovereignty between the different members of the family, and the cessicns made to surrounding chiefs, was reduced to fourteen lakhs of rupees per annum. The Bhonslas of Nāgpur constantly made encroachments under the pretended authority of the Sātāra rājā to collect the *Chauth* and the result was the further loss of 6 Districts reducing the number of *garhs* under the Gond possession to 23 only.

Invasion by the Peshwā.

40. Seorāj Shāh died at the age of thirty-two years in A.D. 1749, after a reign of seven years, and was succeeded by his son Durjan Shāh, a young lad of the most cruel and vicious disposition. A great many of the principal people having been disgusted with numerous instances of his wickedness, his uncle, Nizām Shāh, determined to avail himself of the opportunity, and to attempt to raise himself to the throne by his destruction. He therefore entered into an intrigue with his step-mother and with a view to remove the troops at the headquarters pursuaded him to go on an inspection tour of his territories. He was shortly after requested by his step-mother to return to offer some reparation to his uncle who pretended that his feelings had been hurt by some neglect on the part of his nephew. The unsuspecting youth returned to Mandlā accompanied by only a few followers, and proceeded to his uncle's house where on being admitted inside he was treacherously assassinated. Nizām Shāh was proclaimed king, and immediately steps were taken to satisfy

Durjan Shāh's assassination.

those who might be glad to avail themselves of the opportunity to invade the country under the pretence of punishing the regicides and usurper. An agent was sent off to the Peshwā, as the paramount authority, and to pacify him the Districts of Panāgar, Deorī and Gaurjhāmar were assigned in lieu of the tribute which had been promised on the death of Maharāj Shāh, and the accession of Seorāj Shāh.

Nizām Shāh and further intrigues.

41. By his affable manners and great capacity for business Nizām Shāh soon reconciled all classes of the people to his government. He turned his attention entirely to the improvement of his country, and the cultivation is said to have extended, and the population to have augmented, during his long reign. Nizām Shāh died after a reign of twenty-seven years at Garhā in A.D. 1776, leaving as it was pretended one child, a son Mahipāl Singh, then about one month old, and a recognition of his title to the succession was obtained from the chief of Saugor, acting ostensibly under the authority of the Peshwā. The Dowager Rānī, who had assisted Nizām Shāh in ousting his nephew Durjan Shāh, opposed this and put forward Narhar Shāh, a nephew of Nizām Shāh, as the rightful heir, claiming that she had a right to bestow the government as she pleased and when she found that the Marāthās would not act up to her wishes she once more resorted to intrigue and succeeded in putting Narhar Shāh on the throne. It is however generally believed that Mahipāl Singh was not the son of Nizām Shāh and that certain people had brought him forward merely for the purpose of securing the continuance of their influence in the administration of the government. Nizām Shāh had however an illegitimate son, named Sumer Shāh, who set up his pretentions, and invited the Marāthā chief of Nāgpur, Mūdhojī, to his assistance. The latter marched to invade Garhā Mandlā, but was met by the ministers of the Dowager, and induced to return to Nāgpur on a promise of three hundred and seventy-five thousand rupees. This agreement Narhar Shāh refused to ratify, but Sumer Shāh had by this time gone off to solicit aid from Saugor. He succeeded in ousting Narhar Shāh and the first thing he did was to remove the intriguing Rānī, who he feared would certainly endeavour to get Narhar Shāh restored. She was assas-



Bemrose, Collo., Derby

THE MADAN MAHAL.

sinated, whereupon the Saugor authorities found an excuse to remove him from the throne. He was not backward in preparations to defend himself and proceeded to attack the Peshwā in Saugor but had to retreat to Mandlā. Finding himself insecure he opened negotiations with Narhar Shāh for his restoration to the throne on certain conditions, whereupon he was asked to come to Garhā on the promise of a pardon, but he was seized at Tilwāra and sent as a close prisoner to Saugor, where he was confined in the fort of Gaurjhāmar. Narhar Shāh was then put on the throne, but he soon discovered that he was sovereign merely in name. So he endeavoured to drive out the Marāthās of Saugor but the attempt failed and Narhar Shāh was sent as a prisoner to the fort of Khurai in Saugor, where he died in 1789. In this inglorious fashion ended the rule of the famous Garhā-Mandlā dynasty.

The character of the Gond rule.[1]

42. It is not easy to obtain much information regarding the real character of the Gond rule, but the following passage, extracted from some manuscript notes, dated 1825, and left by Sir W. Sleeman in the Record Office at Narsinghpur, gives probably a very fair idea of the internal policy of the Gond principalities. 'Under these Gond rājās 'the District for the most part seems to have been distribut- 'ed among feudatory chiefs, bound to attend upon the 'prince at his capital with a stipulated number of troops 'to be employed wherever their services might be required, 'but to furnish little or no revenue in money. These chiefs 'were Gonds, and the countries they held for the support 'of their families and the payment of their troops and 'retinue, little more than wild jungles; and we may almost 'trace the subsequent encroachments of cultivation by the 'changes that have taken place in their residences, retiring 'from the plains as they were brought into good tillage, 'and taking shelter in or near the hills, where alone any 'considerable jungle is now to be found. The convenience 'of these jungles in furnishing wood and grass to them and 'their followers is the chief motive of their choice, but I 'believe they would prefer a wild jungle as their residence

[1] This account of the Gond rule is taken from Sir Charles Grant's Gazetteer of the Central Provinces, Introduction, pp. lxxxiii *et seq.*

'to a cultivated plain, did no advantage of this kind exist. 'Some fourteen or sixteen years ago a considerable change 'appears to have commenced in the population and the 'cultivation of the plains in this District, as well as in the 'others that border on the Nerbudda, and indeed all those 'that I have seen in Bhopāl, Nāgpur, &c. Families of differ-'ent castes of Hindus from Bhadāwar, Antarved and other 'countries to the north and north-west, oppressed by famine 'or distracted by domestic feuds in their native countries, 'emigrated to these parts, and, unlike the Muhammadans or 'Marāthās who appeared only as military adventurers, they 'sought a peaceful and a permanent establishment in the 'soil. Generally they seem to have come first in single 'families, the heads of whom took a small but well-chosen 'tract of rich but uncultivated land from the feudatory Gond 'chiefs at a small rent in money, or more commonly in kind, 'and I have traced many of the most respectable and most 'extensive of those families, Brāhmans, Rājputs and others, 'back to the time when they paid only a few *mānis* of grain 'and a few pots of *ghī* a year for immense tracts of waste 'that are now covered with groves, villages and rich culti-'vation, all owing themselves to the industry of the same 'family. These families, increasing from generation to 'generation, and augmented by acquisitions of new emi-'grants from the same countries and tribes, who invariably 'joined themselves to the original establishments, became in 'time valuable and often formidable to the Gond chiefs from 'their superior industry, skill, and enterprise; a better sys-'tem of tillage and greater industry created a greater sur-'plus produce, while a bolder and more enterprising spirit 'enabled them to appropriate it in extending improvements. 'Some of these families from the first held immediately under 'the prince, and almost all ultimately, for as they became 'sufficiently strong to shake off their dependence on the 'feudatory chief, they never wanted a pretext, either in their 'own disputes with them, or in the jealousies of the prince 'himself, who found them better soldiers and more profitable 'tenants than the Gond chiefs, who required all the surplus 'produce of large estates to subsist their large but useless 'train of followers. As these families increased and spread 'over the plains, the Gond population retired to the hills,

'rather than continue on plains deprived of their jungles. 'Some of them still live in the plains, near the banks of rivers 'that retain their jungle, and in other parts, where the soil is 'too poor to pay the expense of clearing away the plains; 'but I have frequently seen a few Gond families detach them-'selves entirely from the rest of the village, and establish them-'selves at another end of the estate in some corner affording 'them at least the appearance of a jungle. In no instance 'have I been able to discover a well or a tank dug, or a grove 'planted by a Gond patel; all those that I have found in 'villages denoted to have been possessed by them having 'been dug or planted by subsequent occupants. The mahuā 'tree whose fruit is much esteemed by them, they no doubt 'cultivated, and though it now appears to grow spontaneous-'ly in the woods to which they have retired, is the only part 'of an estate that seems to form in their mind any local tie, 'and the patel in his annual assessments is obliged to assign 'to every Gond cultivator one or more of these trees, if any 'stand on his grounds, in proportion to the land he may till. 'But not only were groves, temples, tanks and other works of 'ornament and utility not to be found in the different villages 'of a Gond chief's estate; even his residence showed no 'signs of such improvement, and scarcely anything less than 'the capital of a large principality possessed them. The 'surplus produce of their rude state of agriculture was small, 'and had the villages of the Gond chiefs been distributed 'among their relations as those of the heads of the Rājputs, 'Brāhmans and other families from the north were, they 'would have consumed it all in the enjoyment of indolence, 'the highest luxury they knew, as at present. On the con-'trary the new families possessed superior knowledge, enter-'prise, and industry and their imaginations were excited by 'what they had seen or heard of in their parent country, and 'then exerted themselves in such a manner as to render 'every tolerable village superior in works which they esteem-'ed useful or ornamental, to the capital of a Gond chief.' Though this picture represents an indolent semi-barbarous race, it conveys no impression of cruel savagery in the Gond character. The princes, like the people, seem to have been of an easy, unambitious disposition, rarely seeking foreign conquests after their first establishment, and only anxious

to stave off the evil day of dissolution by concessions. The following passage from the narrative of a journey undertaken at the close of the last century by a member of the Asiatic Society, which may be regarded as the nearest discoverable approach to contemporary evidence, speaks well for the stewardship of the Gond princes :—'The thriving condition 'of the Province, indicated by the appearance of its capital, 'and confirmed by that of the Districts which we subsequently 'traversed, demands from me a tribute of praise to the 'ancient princes of the country. Without the benefit of 'navigation—for the Nerbudda is not here navigable—and 'without much inland commerce, but under the fostering 'hand of a race of Gond princes, a numerous people tilled a 'fertile country, and still preserve in the neatness of their 'houses, in the number and magnificence of their temples, their 'ponds, and other public works, in the size of their towns, 'and in the frequency of their plantations, the undoubted 'signs of enviable prosperity. The whole merit may be safely 'ascribed to the former Government, for the praise of good 'administration is rarely merited by Marāthā chieftains, and 'it is sufficient applause to say that the chief of Saugor in twenty years, and the Rājā of Berār in four, have not much impaired the prosperity which they found.' The little that is known of the history of the Gond dynasties quite confirms this account. Under their easy, eventless sway the rich country over which they ruled prospered, their flocks and herds increased, and their treasuries filled.

The Saugor Pandits.

43. The Saugor administration lasted for about 17 years. It was a weak government and was not remarkable for any extraordinary occurrences during its existence. The Marāthās fixed their headquarters at Jubbulpore and built a small fort there, on the site of which now stands the walled-in portion of the city of Jubbulpore, commonly called Lord Ganj, after Lord William Bentinck, the first Governor General who visited these territories, in 1833. During the Saugor-Marāthā rule it was the policy to court the goodwill of the Thākurs and Tālukdārs whose possessions formed a perfect cordon all round the outer boundary of the District, and their fidelity was generally secured by additions to their already extensive freehold grants. Mr. Charles Fraser writes :—'It will be seen that

'many of the Tālukdārs under the Gond Rāj had Jāgir grants 'of some of their villages, that the Saugor government both 'increased the number of such grants and at the same time levied a *peshkash* on those preceding its own supremacy; that 'the Nāgpur government resumed the whole, substituting 'distinct allowances called *nemnuks* deducible from the gross 'assets of the tāluk. Enough however has been ascertained 'from the verbal communications of the older and more respectable inhabitants to establish the superior mildness and 'moderation of the Saugor administration to that of the 'Nāgpur one.'

[1] The Bhonslas of Nāgpur.

44. Jubbulpore and Mandlā were ceded by the Peshwā to Raghuji II. of Nāgpur in 1798 and Jubbulpore remained under the Bhonsla rule (commonly called the Ghonsli Rāj) till its occupation by the British in 1817, 'This period, unfortunately for Jubbulpore, coincided with 'the worst period of Bhonsla administration. The Bhonsla 'government at this time had become arbitrary in its 'measures and corrupt in all its departments. All revenue 'reports of those times teem with accounts of the cruel, 'but often ingenious, processes by which the Marāthā 'collectors slowly bled the people. Inconvenient precedents 'and institutions were of course at once cleared away as 'mere clogs upon the process of extracting money. Villages 'were put up to the highest bidder, but even he was lucky 'if he got to the end of the year safe. After passing with 'alternating hope and fear the rainy season, and watching 'his crops safe through the caprices of the elements, some 'turn in the tide of war or an unexpected robber-raid might 'destroy all the fruits of the toil and expenditure of months. 'If the crops thus sown in sorrow and tended in fear came 'to maturity, there were fresh trials to encounter. Sometimes the lease taken at the beginning of the year, and 'carried through with so much difficulty and anxiety, was 'unceremoniously set aside in favour of a higher bidder, and 'the unfortunate lessee saw the harvest, on which he had 'staked his all, go to enrich some private enemy or clever

---

[1] The account of the Marāthā Administration is taken from Sir Charles Grant's Gazetteer of C. P., pp. xcvii, *et seq.*

'speculator. Sometimes the village would be made over by 'the authorities to troops in arrears to pay themselves, no 'question of course being asked. Sometimes the crop was 'seized directly by the Government officials without any 'pretence of form or reason. Taught by experience, 'the cultivators assumed the appearance of poverty, conceal-'ed their stock, and hung back from taking farms. But 'they were always worsted in the long run. Practically 'they had no choice except to cultivate or to starve, and the 'assignee soon found out, by means of his spies, who were 'in the best position to take the leases. On these dresses 'and titles were liberally bestowed and solemn engagements 'entered into, at a very moderate rate of rent, which engage-'ments were most assuredly violated at the time of harvest 'when the whole produce was at the mercy of the jāgirdār. 'Thus he proceeded from year to year, flattering the vanity 'of the mālguzārs with dresses, titles, and other distinctions, 'and feeding their hopes with solemn promises, till all their 'capital was exhausted. There was a little more difficulty 'in tapping the wealth of bankers and others, whose sub-'stance was stored in a form less accessible and prominent 'than standing crops or flocks, and herds. Even in those 'times it was not for every one to take the royal road, hit 'upon by Raghujī III, of going direct to the coveted strong 'boxes by means of burglary. So the notable device was 'discovering of establishing adultery courts, furnished with 'guards, fetters, stocks and a staff of witnesses. When 'good information was obtained of the existence of a hoard 'of money, the unfortunate possessor was at once charged 'and found guilty, and if the disgrace of a crime which was 'then held to reflect on the whole family of the accused was 'not sufficient to bring him to reason, he was chained in the 'stocks till he agreed to pay ransom. The devices for levy-'ing money with a show of legality in towns and populous 'non-agricultural tracts show almost endless ingenuity, 'though some of them were such flimsy veils for exaction 'that it is difficult to imagine why the pretence of form 'should have been kept up at all. Thus the provisional 'government appointed at Jubbulpore to carry on the 'Administration of the newly-annexed Nerbudda country '(1817) was called upon by its Marāthā officials to decide

'among other questions whether widows should still be sold 'for the benefit of the State, whether one-fourth of the 'proceeds of all house sales should continue to be paid into 'the treasury, and whether persons selling their daughters 'should not still be taxed one-fourth of the price realised. 'At a meeting of the same provisional government there is 'an entry ordering the release of a woman named Pursia, 'who had been sold by auction a few days before for seven-'teen rupees. The taxes levied in different places varied 'with the idiosyncrasies of the government, or of the 'individual tax-collector; but among them it may be noticed 'that people were mulcted for having houses to live in, 'or if they had no houses, for their temporary sheds or huts; 'if they ate grain, their food was taxed at every stage in its 'progress through the country; if they ate meat, they paid 'duty on it through their butchers. When they married 'they paid for beating drums or putting up marquees. If 'they rejoiced at the set Hindu festivals, they paid again; 'at the Holi, for instance, on the red powder which they 'threw at each other, at the Polā, on the ornaments which 'they tied to the horns of their cattle. Drinkers were 'mulcted by an excise and smokers by a tobacco duty. 'Weavers, oil-pressers, fishermen, and such low-caste 'industrials had as a matter of course to bear a special 'burthen. No houses or slaves or cattle could be sold, no 'cloth could be stamped, no money could be changed, even 'prayers for rain could not be offered without paying on 'each operation its special and peculiar tax. In short a poor 'man could not shelter himself, or clothe himself, or earn 'his bread, or eat it, or marry, or rejoice, or even ask his 'gods for better weather, without contributing separately on 'each individual act to the necessities of the State.' In addition to these regular taxes forced benevolences were occasionally exacted from men who would otherwise have escaped. The sufferings of the people were further aggravated by the ravages of the wandering robber bands who obtained such a terrible notoriety under the name of Pindāris. From their standing camps in the Nerbudda valley these marauders poured forth periodically carrying fire and sword wherever they went. 'There is nothing in history more 'moving than the pictures of the utter desolation which these

'human locusts left in their track. Their plan of action is 'thus described by Malcolm :—"The Pindāris were neither 'encumbered by tents nor baggage ; each horseman carried a 'few cakes of bread for his own subsistence and some feeds of 'grain for his horse. The party which usually consisted of 'two or three thousand good horse with a proportion of 'mounted followers advanced at the rapid rate of forty or 'fifty miles a day, neither turning to the right nor left they 'arrived at their place of destination. They then divided and 'made a sweep of all the cattle and property they could find ; 'committing at the same time the most horrid atrocities and 'destroying what they could not carry away. They trusted 'to the secrecy and suddenness of the irruption for avoiding 'those who guarded the frontiers of the countries they invad-'ed, and before a force could be brought against them they 'were on their return. Their chief strength lay in their being 'intangible. If pursued they made marches of extraordinary 'length, sometimes upwards of sixty miles, by roads almost 'impracticable for regular troops. If overtaken, they dis-'persed, and re-assembled at an appointed rendezvous; if 'followed to the country from which they issued, they broke 'into small parties. Their wealth, their booty, and their 'families were scattered over a wide region, in which they 'found protection amid the mountains and in the fastnesses 'belonging to themselves, and to those with whom they 'were either openly or secretly connected ; but nowhere did 'they present any point of attack, and the defeat of a party, 'the destruction of one of their cantonments, or the temporary 'occupation of some of their strongholds, produced no effect 'beyond the ruin of an individual freebooter, whose place 'was instantly supplied by another, generally of more des-'perate fortune and therefore more eager for enterprise." 'But the ways of the Pindāris were not so very much worse 'than those of the more regularly licensed plunderers who 'called themselves revenue collectors. In Jubbulpore in 1809 'the maddened cultivators, exasperated by the exaction 'of a Marāthā Sūbah Nārāyan Rao, went so far as to 'call in the aid of the notorious Pindāri leader Amīr Khān 'preferring the crash of a sudden raid, with all its 'terrible accompaniments of fire and sword, to the slow 'torture of constant pressure, or perhaps hoping that in

'the general upset, good men might chance to come uppermost. The landholders gained their object at first, as the 'arrival of the Pindāri army so thoroughly frightened the 'Marāthā governor that he quite forgot for the time to go on 'with his exactions; but before the plunderers left the 'country they had made themselves as much felt by their 'friends as by their foes, appropriating all they could seize, 'insulting the temples of the Hindus, defacing the images 'and committing outrages and excesses such as will not 'readily be forgotten, or the horror excited by them be 'buried in oblivion.' The result of the Marāthā misrule was that the District was in an exhausted and impoverished condition when it was acquired by the British in 1818.

Annexation of Jubbulpore by the British.

45. The commencement of British rule dates from 1818. In November 1817, on the first intelligence of the commotions at Nāgpur and the treachery of the Rāja Appa Sāhib, Brigadier General Hardyman, who was commanding one of the numerous detached forces assembled on the confines of Central India for the destruction of the Pindāris, was directed by Lord Hastings to advance his force from the frontier of Rewah in the direction of Nāgpur. The Brigadier-General accordingly commenced his march on the 7th December from Maihar. His force consisted of a regiment of cavalry, a regiment of European foot, and four guns; the native battalion being so far in the rear, that it was directed to halt at Bilahri till a favourable opportunity should offer for its junction.[1] On his approach to Jubbulpore on the 19th, Brigadier-General Hardyman found the enemy drawn up and strongly posted to oppose his possession of that place. 'They were in numbers about three thousand, of whom about one thousand 'were horse, and stationed on the left. Their right was on 'a rocky eminence, where they had likewise four brass guns. 'The Brigadier-General placed his guns in the centre with 'three companies of the 17th foot on each side of them, and 'two companies in their rear. He sent two squadrons, under 'Major O'Brien, round the left of the enemy to cut them off

[1] The account of this engagement is taken from Lieut.-Col. Blacker's Memoir of Operations during the Mahratta War of 1817—19, pp. 119 and 120.

'from the river, masked his guns by another squadron, and 'held a squadron in rear of his left as a reserve. On arriv-'ing near enough to the enemy's centre, the guns being un-'masked were fired with shrapnel shells, and were immedi-'ately answered. A fire was kept up for about a quarter of 'an hour, when the enemy's infantry wavered; at which the 'reserve squadron was ordered to charge the battery. This 'service was gallantly performed, and the artillerymen sabred 'and pistolled at their guns. The advance squadron then 'attempted to charge the infantry, who had descended into 'the plain; but they reascended the eminence, and obliged 'it to return under a heavy fire. On this, one wing of the '17th foot was brought up by the Brigadier-General to storm 'the height; and effected the same by a strenuous exertion, 'which ended in a severe loss to the enemy. Those who 'fled into the plain, down the opposite side, were mostly 'intercepted by the advance squadron, which made a detour 'round their right, as the 17th ascended. This affair, which 'appears to have been creditably conducted and executed, 'occupied about two hours. Should any doubt arise respect-'ing the propriety of attacking the enemy's battery on 'strong ground with cavalry, the question will probably be 'decided by a reference to the small loss of British troops, 'amounting only to twelve men and twenty horses; among 'the former were three European and one native officer. In 'the course of that night and the following morning, the 'enemy abandoned the town and *garhi* of Jubbulpore, leav-'ing behind them nine pieces of ordnance and various mili-'tary stores.' Jubbulpore was henceforward occupied by British troops and became British territory under the agreement made after the battle of Sitābaldi in 1817, which was subsequently confirmed by the treaty of 1826.

Early system of government.

46. Immediately after the occupation a provisional government was formed, the president of which was Major O'Brien. When this provisional government was abolished the District with the rest of the Nerbudda country was for a time governed by a Commissioner, who was subject to the Resident at Nāgpur. In 1820 a division of 12 Districts was formed under the designation of 'The Saugor and Nerbudda territories,' in which Jubbulpore was included

and was placed under an agent to the Governor-General at Jubbulpore, while on the constitution of the North-Western Provinces in 1835 the Saugor and Nerbudda territories were added to the new Province.

The Bundelā rising and consequent changes in the Administration.

47. In March 1842 occurred what is known as the Bundelā rising. It originated in the Saugor District and was caused by the discontent of the people at the jurisdiction of the new civil courts. Two Bundelā landlords in the Saugor District resisted execution, killed some of the police, and burnt and plundered several towns. The insurrection also broke out hotly in the Hirāpur taluk, then attached to Jubbulpore but subsequently transferred to the Narsinghpur District. The rest of the District was however not much affected. The rebellion lasted for about a year and in consequence of the supposed discredit thrown by it on the British administration Lord Ellenborough made a complete reorganization of the Province. He separated it from the North-Western Provinces and again constituted it the charge of an agent to the Governor-General. At the same time he made a clean sweep of the British officials serving there, and sent one of the ablest officers in the Indian services, Sir W. H. Sleeman, to act as the first agent under the new conditions. This arrangement was not found to work well, however, and the territories were again attached to the North-Western Provinces in 1852. After the Mutiny the existence of these isolated pieces of territory in the centre of India, too remote from the headquarters of any Local Government to be efficiently administered, led to the determination to form a fresh Province, which was carried into effect in 1861, the new Province being called the Central Provinces.

The Mutiny.[1]

48. In 1857, the year of the Mutiny, the Jubbulpore station was garrisoned by the 52nd Native Infantry commanded by Lieut.-Col. Jamieson. It was the headquarters likewise of Major

[1] The description of occurrences during the Mutiny is taken from Malleson's History of the Mutiny supplemented by a narrative submitted by Major Erskine, Commissioner of Jubbulpore, to the Secretary to Government, North-Western Provinces, No. 368A., dated 10th August 1858.

Erskine, the Chief Political Officer in the Saugor and Nerbudda territories. At the beginning of the year small wheaten cakes (*chapātis*) were passed in a most mysterious manner from village to village, and the matter was reported by Major Erskine, but he considered it doubtful if the signal was understood by any one in the District, or even if it referred to the approaching rebellion, though that this was so was afterwards the general opinion. News of the Mutiny at Meerut reached Jubbulpore in the middle of May and for a few weeks afterwards the men of the 52nd showed no sign of disaffection, but it soon became clear that they too were only watching their opportunity. On the 16th of June one of the men attempted to murder the Adjutant; and though the man in question was subsequently released on the ground of insanity the conduct of his comrades a little later proved that there had been method in his madness. They assumed the usual airs of authority, treated their officers with patronising familiarity and declared that they would only mutiny if a European regiment were sent to disarm them. One consequence of this was that all the ladies and children were recommended to leave the station and go to Calcutta or Nāgpur. The Saugor troops broke into mutiny on the 1st July and this news caused an unmistakeable change for the worse in the conduct of some of the men of the 52nd at Jubbulpore; about the 3rd July three companies took their muskets out of the bells of arms, with no good intention but they were pacified. As the arrival of the mutineers from Saugor was expected and as there were rumours of risings in the District it was decided that all the Christians should assemble in the agency house occupied by the Commissioner. Hundreds of workmen were employed in barricading doors, filling bags and boxes with sand, and piling them up in the open verandahs and on the top of the house (a large *pakkā* flat-roofed one): supplies and stores of all kinds were also collected. Two small guns (said to be dangerous to the gunners if fired) were dug up and placed in position, and the ladies employed themselves in making powder bags. The civil administration was carried on as usual. The news that a native brigade was advancing on Jubbulpore from Kamptee would appear to have produced a good effect on the men of the 52nd, for in the interval between the period referred to

above and the arrival of the brigade on the 2nd of August they were usefully employed by Major Erskine in repressing disturbances in the District. Detachments of the regiment were also posted to the different tahsīls and to Katangī on the Hiran river with a view to stopping the plundering that had now become rife in the District. The Kamptee movable column, for it was no more, consisted of the 4th Madras Light Cavalry under Captain Tottenham, the 33rd Madras Native Infantry under Colonel Millar commanding the column, a battery of field artillery under Captain Jones, and one company rifles, Nāgpur irregular force, under Lieut. Pereira. This column marched into Jubbulpore on the 2nd of August. After a halt of a few days, the larger portion of it was sent into the neighbouring Districts to restore order. During its absence an old Rājā of the Gond dynasty, Shankar Shāh, his son, and some adherents of his house were convicted on the clearest evidence of plotting the destruction of the English at Jubbulpore and the plunder of the station. On the 18th of September the father and son were blown away from guns, the adherents being reserved for the following day. But little doubt was entertained that the criminal Rājā and his criminal son had made many efforts to seduce the men of the 52nd from their allegiance. To allay then the excitement which it was apprehended their execution might create in the minds of the rank and file, Colonel Jamieson and other officers of the regiment proceeded almost immediately to the lines, and explained to the men that the Rājā and his son had merely paid the penalty for proved misconduct. They judged from the manner of the men that they had removed all apprehensions from their minds. At 9 o'clock that night, however, the entire 52nd regiment marched quietly out of the station without noise or alarm, and proceeded some twenty miles without a halt to the tahsīldāri of Pātan. At that place was stationed a company of their own regiment commanded by Lieut. MacGregor. MacGregor who naturally had had no intimation of the proceedings of the regiment, was surprised and at once placed in confinement under sentries. The sepoys then sent in to their Colonel a letter, most respectfully worded, in which they announced their intention of marching to Delhi and offered to release MacGregor in exchange for ten sepoys left behind in Jubbulpore. This offer not having been complied with, the

rebels kept their prisoner till they were attacked and then shot him. But long before the commission of this atrocity information of the high-handed action of the 52nd native infantry, and orders to return to Jubbulpore had been conveyed to the Madras column in the District. That column consisting of four hundred men of the 33rd Madras native infantry, the rifle company of the 1st Madras native infantry, one troop of the 4th Madras light cavalry, and four guns, manned by European gunners, happened to be at Damoh, sixty-five miles to the north-west of Jubbulpore. It started at once on the 21st of September. On the night of the 25th it encamped at Singrāmpur, about twenty-five miles from its destination.

Attack on the rebels at Katangī.

49. Between this place and Jubbulpore, close to a village called Katangī, flows a navigable river, the Hiran, the passage across which, it was thought possible, might be disputed by the 52nd. To secure the means of crossing it, a party, consisting of the grenadier company, 33rd Madras native infantry, under Lieut. Watson, and a few troops of the 4th under Major Jenkins, left the camp at 2 o'clock in the morning of the 26th. At day-break as they were nearing Katangī, Jenkins and Watson, who were riding in front of their column, were suddenly fired at, and almost immediately surrounded. How they escaped it is difficult to imagine. But, notwithstanding all the efforts made by the sepoys, they fought their way through them and reached their men. These were not numerous enough to take the aggressive. Jenkins, therefore, drew them up on a hill difficult to escalade, and there awaited the arrival of the main column. To this column, on the point of starting about 6 o'clock in the morning, information arrived, in an exaggerated form, of the events at Katangī. The two European officers were reported killed, and the rebels were said to be pressing on in force. Eager to avenge their officers and relieve their comrades, the gallant native soldiers of the coast army hurried forward. On reaching the mouth of the gorge leading to Katangī they found the 52nd had taken up a very strong position, both flanks covered by thick jungle. Without hesitating they opened fire from the guns, and then attacked the rebels with the bayonet and drove them before them. On reaching Katangī they were joined by Jenkins and

Watson. The pursuit was continued beyond that place. In Katangī the body of MacGregor, murdered that morning, was found. The rebels suffered severely. A hundred and twenty-five dead were actually counted on the field, and it is certain that many more were wounded. On the side of the victors one man was killed and fifty were wounded. The column then returned to Jubbulpore. The remnant of the 52nd native infantry, numbering some five hundred and thirty men, continued after its defeat at Katangī to ravage the country, joining the adherents of rebel Rājās; these men took advantage of the withdrawal of the Madras column from Damoh to plunder that place and to release the prisoners. They then took possession of a strong fort, about thirty miles from Saugor, called Garhākotā, and from this they constantly sallied forth to plunder and destroy. In fact, as the year drew to a close, in spite of the fall of Delhi, the daring of the rebels increased, whilst the handful of British shut up in the stations, at long distances from each other, and powerless to interfere effectually, could do little more than hold their own. Several skirmishes indeed occurred, but with no decisive result. In one of these, early in November near Jubbulpore the Madras troops defeated the enemy, but their commander Captain Tottenham was killed, and in a subsequent action in the same month Major Jenkins, Assistant Quarter Master General of the Nāgpur force, was also killed. In others the defeat of the rebels merely signified a disappearance from one jungle to appear immediately in another. One of the most troublesome of the rebels was the Rājā of Bijerāghogarh, who had some 20 or 30 good guns, and for some time completely closed the Mirzāpur road to all travellers. Troops were on several occasions sent out against him from Jubbulpore but without any permanent effect, and the road was not opened till January 1858 when success was achieved by a combined movement of the Rewah troops and a Jubbulpore detachment. The rebels of the Bargī pargana also gave considerable trouble but in December their leader was captured and hanged by Captain Woolley, who had marched from near Sānkal in Narsinghpur, and from that time not a rebel was seen to the south of the Nerbudda. The march of Sir Hugh Rose through Saugor early in 1858, when he took the forts of Rāhatgarh and Garhākotā and defeated

the insurgents in several engagements had a great effect in restoring order, as it began to be apparent that the triumph of the British was inevitable. Sir Hugh Rose was followed by General Whitlock who had been appointed to the command of a division for service in the Nāgpur, Saugor and Nerbudda territories. His force consisted of an artillery brigade composed of two troops of horse artillery and three companies of foot artillery, with two light field-batteries attached, commanded by Lieut. Col. W. H. Miller; of a cavalry brigade composed of the 12th Lancers and the 6th and 7th Madras light cavalry, commanded by Col. A. W. Lawrence; of one brigade of infantry composed of the 3rd Madras Europeans and the 1st and 5th Madras native infantry, commanded by Col. Carpenter; of a second infantry brigade composed of the 43rd light infantry and the 19th and left wing of the 50th Madras native infantry commanded by Col. McDuff, 74th Highlanders. There were also details of sappers and miners. The force was to be massed at Jubbulpore, and to march thence towards Bānda. General Whitlock arrived at Jubbulpore on the 3rd February; and on the 17th leaving a small garrison in Jubbulpore he marched first along the Mirzāpur road as far as Jukehi with the object of overawing the mutinous land-owners in the Rewah District. Thence he marched to Damoh. He was accompanied by Major Erskine in whose opinion General Whitlock's movements were characterised by extreme caution, for though strongly urged by the former to drive the rebels from the strong places they occupied, and from which they still continued to harass the country between Jubbulpore and Damoh, he refused to send a single detachment for that purpose from his force. He preferred, he said, to keep it massed in his hand. The result was that, although Whitlock's column secured the ground on which it encamped, scared into submission the villages through which it marched, and even recovered Damoh, it left the population of the Districts still occupied by rebels astonished at the regard paid to the latter. So far as the Jubbulpore District was concerned, however, the mutiny was now practically over, for, though parties of rebels still continued to plunder and burn police posts, there was no concerted action and they generally suffered more loss than they inflicted. In May an amnesty was proclaimed and many rebels surrendered,

and by August 1st Major Erskine was able to declare that peace was restored to the District, such rebels as were still at large being treated as ordinary dacoits.

History of the Bijerāghogarh tract.

50. The Bijerāghogarh pargana was originally the second half of the Maihar Rāj, which was founded by one Beni Hazūri, a Jogi by caste, and a servant of the Rājā of Pannā who was made killedār of Maihar Fort and was given a small Jāgīr in 1751 A.D. His son Durjan Singh managed to throw off the Pannā yoke and entered into a direct treaty with the British Government in A.D. 1806, receiving at the same time a regular *sanad* for the Maihar State. Durjan Singh died leaving two sons, Bishan Singh and Prayāg Dās. The brothers not being able to agree together were constantly fighting, so the State was equally divided among them. By this division Maihar with a suitable number of villages fell to the share of the elder brother, and the tract now known as Bijerāghogarh to that of the younger. Under the administration of Prayāg Dās the Bijerāghogarh tract prospered while that of Maihar suffered from the misrule of his elder brother. Prayāg Dās having died at an early age, leaving an infant son as heir to his *gaddī*, the management of the estate had to be undertaken by the British Government as the widows of the deceased were found to be unequal to the task. Every care was taken to have the minor chief properly educated and brought up in such a manner as to fit him for the proper management of his country, but during the mutinies of 1857 he was led away by evil advice and raised the standard of rebellion. He procured the murder of the tahsīldār and committed many other acts of rapine and blood-shed. On the British arms proving victorious he fled away in disguise and for some time roamed about the country. He was however ultimately apprehended, convicted and sentenced to transportation for life. But he died at Benāres on his way to the penal settlement. Bijerāghogarh was added to this District in 1865.

ARCHÆOLOGY.

Architectural remains.

51. The District has many ancient remains, the oldest of which is the rock edict of Rūpnāth which is the name of a famous *linga*

of Siva placed in a cleft of rock where a nullah pours over the face of the Kaimur range of hills 14 miles from Sleemanābād in the Sihorā tahsil. Next in point of antiquity and importance are the remains of temples at Bahurīband and Tigwān built after the Gupta style which is distinguished by flat roofs, the prolongation of the head of the doorway beyond the jambs and pillars with massive square capitals and deviation in plan from the cardinal points. Ruins of temples and statues made in the mediæval Brahmanic style are found in Tewar, Bherāghāt, Bargaon, Bilahrī, Chhoti Deori, Daimāpur, Deogaon, Karanpurā, Kūmhi, Majholi, Nitarrā, Nāndchānd, Nanhwāra, Rīthi, Simrā, Bahurīband, Umaria and Tigwān. The Chaunsath Jogini temple of Bherāghāt belongs to a class which is rarely found. It is a cloister open to the sky, and consists of a circle of 82 square pillars with the same number of full pilasters arrayed opposite to them against a back wall. The cloisters are fitted with the images of Joginis. Bahurīband contains a colossal Jain statue and images of gods of this religion are also found in Bargaon and some finely carved images brought away from the ruins have been placed in Cursetji's garden at Jubbulpore. Remains of forts may be seen at Bālakoti, Bhitrī, Magardhā, Kanhwāra, Bherāghāt, Kūnda Mardāngarh, Bijerāghogarh, Khireni, Rāmpur, Imlīgarh, Bilahrī, Piparia and a few other places and a Gond palace known as Madan Mahal near Jubbulpore constitutes a curiosity. It is built on a huge rounded boulder the upper part of which on one side overhangs the base. The building consists of small vaults supporting an upper story to which a courtyard is attached. The other notable remains of the District are the fine tanks such as Rāni Tāl, Gangā Sāgar, Sangrām Sāgar and Adhār Tāl near Jubbulpore, Lachhman Sāgar in Bilahrī, Sāgar in Karanpurā, Rām Sāgar in Gosalpur and Burhāgar near Panāgar. There are also some *sati* pillars one of which at Bahurīband is dated 1298 A.D.

Inscriptions and coins.

52. Several inscriptions mostly belonging to the Kalachuri dynasty have been found in Tewar or round about it. There is an Asoka edict at Rūpnāth near Bahurīband. It is the oldest record found in the Province belonging as it does to



Bemrose, Collo., Derby.

SCULPTURES IN MESSRS. CURSETJI'S COMPOUND, JUBBULPORE.

the 3rd century B.C. Copper plates of the Parivrājaka Mahārājas belonging to the 5th and 6th centuries have been found in Kāritalai near Bijerāghogarh and a huge inscription was found in Bilahrī which is now kept in the Nāgpur Museum. Bahurīband, Bargaon, Chhoti Deori, Kūmhi, Sihorā, Simrā, Tigwān, Tola and Daimāpur are other places which contain or have furnished materials for the epigraphist. Among coins found in the District the oldest appear to be those found at Tewar on which Tripuri, its old name, is inscribed in Brāhmi characters of probably the 3rd century B.C. They are struck only on one side and by a method peculiarly Indian, according to which the metal was stamped while in a semi-molten state, with the result that the impress of the die was left enclosed in a deep incuse square.[1] The symbols on the coin are a cross, a curved line and a *chaitya*. The cross perhaps stands for a trident, the symbol of power, the curved line for the river Nerbudda on which Tripurī is situated and *chaitya* or temple for 'piety'. The other coins found here are those of the Kalachuri king Gāngeyadeva belonging to the 11th century. Although a genealogy containing 15 names of this line of kings has been made out, coins have been found of this king alone. The style of coinage introduced by him was novel and very simple. The obverse is wholly occupied by the Rājā's name and the reverse has a rudely executed figure of a 4-armed goddess, presumably Lakshmī, but Cunningham calls it Durgā or Pārvatī. The coins of Gāngeyadeva are most commonly met with in gold. The largest coins are Attic drachmae in weight known as *dramma* in Sanskrit. This type was afterwards imitated by the Chandellas of Jajhauti, the Tomaras of Delhi and the Rāthors of Kanauj. All other coins found in the District belong to Musalmān kings such as Shāh Alam, Aurangzeb, Muhammad Shāh, Ahmad Shāh, Akbar, Jahāngir, Muhammad Tughlak, Shāh Jahān, &c. A collection of thin silver coins was however discovered in 1905 in the Murwāra tahsīl, which on examination were found to be Indo-Sassanian. They have the head of the king on the obverse and fire altar on the reverse. They probably belong to the 5th or 6th century and are believed to have been introduced or brought

[1] Rapson's Indian Coins, p. 14.

by the Hūnas. A treasure trove was found in 1908 between Garhā and Madan Mahal consisting of 146 gold and 36 silver coins. Almost all of them are Muhammadan, bearing the names of the Sultāns of Delhi, Gujarāt and Kashmīr and the Bahmanis of Kulbargā, the Khiljīs of Mālwā and the Sharkīs of Jaunpur, ranging in date from A.D. 1311 to A.D. 1553. Three of the gold coins are suspected to be Nepālese.

CARVING OF THE TEN INCARNATIONS OF VISHNU, BAHURIBAND.



CHAPTER III.

POPULATION.

Statistics of Population.

Statistics of area and population, density, towns and villages.

53. The area and population of the District in 1901 were 3912 square miles and 680,585 persons respectively. The District is tenth in area and fourth in population among the Districts of the Central Provinces excluding Berār and 13th and 6th respectively among the Districts of the combined Provinces. It is divided into three tahsīls, Murwāra lying to the north, Sihorā in the centre and Jubbulpore to the south. The figures of area and the population of the three tahsīls are as follows :—

	Area.	Population.
Jubbulpore	1519	332,488
Sihorā	1197	186,424
Murwāra	1196	161,673

The Jubbulpore tahsīl is thus the largest and the Murwāra tahsīl the smallest both in respect of area and population. The total density of population is 174 persons per square mile as against 112 for the British Districts of the Province excluding Berār and 120 for the same including Berār. The density of the rural area is 146. The District is the most thickly populated in the Province excluding Nāgpur and Akolā. Of the three tahsīls Jubbulpore is the most closely populated and Murwāra the most sparsely, the respective figures being 219 and 135 persons per square mile. The Sihorā tahsīl has a density of 156 persons per square mile. The most thickly populated part of the District is the Sihorā Station-house area with a density of 235 persons. Next come Pātan, Garhā and Panāgar with 233, 210 and 205 persons respectively, while Silondi Station-house area with a density of 102 is the most thinly populated. In 1901 the District had a little less than 1½ acres of cropped area and about 2 acres of cultivated area per head of population. The District contains three towns and 2298 villages according to the census of 1901. In the village lists a total of 2540 towns

and villages is shown of which 2301 are inhabited and 239 uninhabited. The population of the towns in 1901 was as follows:—Jubbulpore 90,316, Murwāra 14,137 and Sihorā 5595. The urban population was thus 110,048 persons or 16·2 per cent. of that of the District. This is only exceeded in the Districts of Nāgpur, Amraoti and Akolā where it was 32, 21·8 and 16·5 respectively. The population of these three towns in 1872 was 55,188, 2885 and 3988 persons respectively; by 1881 the figures had risen to 75,705, 8612 and 5736 representing an increase on the whole of 45 per cent. The census of 1891 disclosed a further advance in population of 10·7 per cent., when Jubbulpore contained 84,481 persons, Murwāra 9460 and Sihorā 5798. At the last census of 1901 the population of Jubbulpore and Murwāra shewed a further increase but Sihorā had declined a little. The population of these towns in 1901 shows an increase of 77 per cent. over that of 1872, Jubbulpore showing an increase of 64, Murwāra of 390 and Sihorā of 40 per cent. The remarkable development of Murwāra is due to its having become the junction station for the E. I. Railway, B.-N. Railway and I. M. Railway section of the G. I. P. Railway and to its being the centre of some important industries such as the lime and paint works. It is rapidly growing in importance and is one of the leading goods-stations on the East Indian Railway. Besides the towns the District has nine villages with a population of 2000 or more persons. These are Panāgar (4082), Pātan (3399), Katangī (3330), Barelā (3178), Umaria (2646), Bilahrī (2356), Majhgawān (2214), Bijerāghogarh (2200), and Piparia (2012). Forty villages contain between 1000 and 2000 persons while 205 or 9 per cent. of the total number contain between 500 and 1000 persons. The number of villages containing less than 500 persons in 1901 was 2044, those containing between 100 and 200 being 659 and those containing less than 100, 667. Excluding towns the average number of occupied houses to an inhabited village in 1901 was 59 and of persons 247.

Growth of population.

54. The population of this District has been enumerated on seven occasions, *viz.*, in 1825-27, 1854-58, 1866, 1872, 1881, 1891 and 1901. The first census was taken during the operations of

the second quinquennial settlement between 1825 and 1827 when a population of 467,627 persons was returned. The next census was taken 30 years later or during 1854 to 1858 when measurement operations were going on for the settlement of 1866, giving a result of 480,504 souls. Thus it would appear that even after the addition of Bijerāghogarh tahsīl containing above 80,000 people, the population had only increased by 13,000; but large slices had been taken off the eastern part of the District and added to the Mandlā District and to the Rewah State. Mr. A. M. Russell[1] reviewing these figures said that on the whole even by the settlement *khānā-shumāri* and after leaving out the Bijerāghogarh subdivision the population of the District had increased considerably during the 30 years between 1825 and 1855 and that it had been steadily increasing, especially the urban population, since the latter year in a very sensible manner. As a result we find a population of 620,201 recorded in the census of 1866, showing an increase of 29 per cent. on that of 1854-58. In 1869, 123 villages including the Singrāmpur pargana were transferred from Jubbulpore to Damoh. This combined with the famine of that year (1869) which was severer in the Murwāra tahsīl than anywhere else in the Province reduced the population in 1872 to 528,859 persons, a decrease of 14·7 per cent. on 1866. In 1881 the population was 687,233 persons showing an increase of 158,374 persons or of 30 per cent. on 1872. This was more than the average for British Districts and was due mainly to a recent large return of emigrants who had left the District under pressure of scarcity in 1868-69 and also to large immigration, especially from the Native States to the north, both for cultivation and trade. The Deputy Commissioner also attributed a difference of about 24,000 persons to inaccuracies in 1872. The returns of vital statistics showed an increase of 8 per cent. only. Of the population enumerated, 83 per cent. were born in the District, 4 per cent. in other Districts of the Province and 13 per cent. beyond it. In 1891 the population was 748,146 persons showing an increase of 8·8 per cent. on 1881 as against 9·6 per cent. for British Districts as a whole;

---

[1] Settlement Report of 1869, page 22.

the increase deduced from vital statistics during the intercensual period was 5·6 per cent. The District would have shown a much smaller variation from the census of 1881, had it not been for the temporary influx of large numbers of labourers, just previous to the enumeration, from Central India and the surrounding Districts. It is on this account that the rate of increase according to the census was so much higher than that which was furnished by the registration returns. The actual resident population of the District was probably considerably lower than that shown by the census figures. The tahsīl which exhibited the highest rate of increase was Sihorā with 10·5 per cent. while the lowest percentage of increase 6·5 occurred among the rural population of the Jubbulpore tahsīl. The number of persons who in 1891 returned themselves as born beyond the District was slightly less than the number so recorded in 1881, but the difference was slight in comparison with the total number of immigrants. There was therefore a considerable amount of fresh immigration into the District to keep the numbers of foreign-born up to their former strength. About the time of the census Damoh and the Central India States sent large numbers of labourers into Jubbulpore for the wheat harvest. There was thus no falling off in the figures for immigrants from Central India as was the case in Saugor and Damoh and as otherwise would have been the case in Jubbulpore also. The number of such immigrants returned in 1891 was 56,748 against 56,008 at the enumeration of 1881. In 1901 the population was 680,585, having decreased by 9 per cent. since 1891. The decrease was due to the cycle of bad years that intervened between the two enumerations, culminating in the two famines of 1897 and 1900. The number of deaths exceeded that of births in 1891 and in every year between 1894 and 1898. In 1896 and 1897 the number of deaths was respectively two and three times that of births, the Murwārā tahsīl in 1897 returning 5 deaths for every birth. The decrease of population was highest in the Sihorā tahsil with a percentage of 12·5 and lowest in the Murwāra tahsīl with 7·2 per cent., the Jubbulpore tahsīl showing a decrease of 8·1 per cent. The large increment of 4,677 persons in Murwāra town combined with the fact that the ordinary

immigration of labourers for the cutting of the wheat crop in the Sihorā and Jubbulpore tahsils had not taken place at the time of the census accounts for the decline being larger in these two areas than in Murwāra. The excess of deaths over births during the decade was 49,000 and the census population was 18,000 less than that deduced from vital statistics. About 17,000 people are said to have emigrated to Assam, a fact which explains the difference.

Vital statistics.

55. Between 1881 and 1891 the birth-rate averaged 41 per mille and was ninth in the Province and the death-rate was 35·4 per mille or the 5th highest. During the decade ending 1901 the birth-rate was 34·3 or about the same as for the British Districts as a whole, but the death-rate was 40·9 per mille, the high rate being due to the prevalence of scarcity and famine. The excess of deaths over births was common to most of the Districts of the Province. During the six years 1901-06 plague and cholera have retarded the natural growth cf population, the excess of births over deaths during this period amounting to only 35,129 persons.

Migration.

56. In 1901 nearly nine-tenths of the population (86 per cent.) were shewn as having been born within the District. Of the imigrants amounting to nearly about 93,000 persons about 10,000 came from Damoh, 36,000 from the Central India Agency and 21,000 from the United Provinces. Of 37,000 emigrants from Jubbulpore enumerated in other Districts of the Province, 9000 resided in Mandlā, 6000 in Seonī, 5000 in Damoh, 4000 in Narsinghpur, 3000 in Saugor and 3000 in Chhindwāra. Besides, about 31,000 born in the District were enumerated in other Provinces of India, emigration to Assam alone accounting for more than half of this figure. Immigration takes place from the adjoining District of Damoh and Central India States and the United Provinces. Emigration except to Assam does not take place to any appreciable extent in normal years.

Diseases. Fevers.

57. The diseases which cause by far the greatest amount of sickness and mortality are malarial fevers, and no part of the District is free from them. The seasonal prevalence is, as a

rule, from the end of August to the latter part of November; during this period the temperature is high and there are pools of water everywhere in which the malaria-carrying mosquitoes can develop; also the margins of the many slowly-flowing streams, which run between the broken hills intersecting the District, afford breeding places for these insects. Moreover, the mode of agriculture, by which the wheat fields are kept inundated for long periods during the rains, tends still further to increase the water surfaces on which the anopheles mosquitoes multiply. These diseases, when taken in time, yield readily to treatment by quinine, the virtues of which are known to many. In out-of-the-way parts of the District the old treatment of starvation during the fever is still in vogue. This treatment is called *langhan* and consists in withholding food of every kind; only a little boiled water or water in which a red-hot piece of iron has been dipped is given. Milk is specially avoided. During convalescence the first food allowed is a weak decoction of 'mūng *dāl*.' It is no wonder that under this treatment many succumb and many lay themselves open to attacks of other diseases such as dysentery and pneumonia. The average annual mortality from fevers during the period 1886—1895 was 18·73 and during the period 1896—1905, 20·84 per mille. Of course 'fevers' as entered by the ignorant villagers include many diseases, other than malarial fevers, attended by a rise of temperature such as lung diseases and influenza. There is no record of any case of black-water fever having been observed in this District. Cases of typhoid fever are not uncommon among the native inhabitants of Jubbulpore.

58. Cholera is a fairly regular visitor. In the past twenty years, the District has only been completely free from this disease during eight. In seven of the remaining years the epidemic prevalence was less than 0·80 per mille. Severe epidemics ravaged the country during the years 1889, 1891, 1896, 1897 and 1900; the three last mentioned were years of disastrous famine, in whose train cholera usually stalks. In the three latter epidemics the mortality was 6·01, 3·30 and 3·11 per mille respectively. On an average the case mortality is about 50 per cent., but varies with the epidemic. An epidemic

Cholera.

with a mortality under 50 per cent. would be considered mild. Epidemics generally break out in the hot weather or during the rains; those occurring in the latter season are usually more severe than in the former. In the treatment of cholera the chief domestic remedy is a mixture of onion juice with *podīna* and black pepper. Externally ginger and mustard are rubbed over the body. No food is given, and water only in restricted quantities. In some parts of the District cholera corpses are buried instead of being burnt, as it is thought that cremation of these bodies tends to spread the disease. Occasionally during epidemics a he-goat is marked red on the forehead with *sendur*, led to the village boundary, and set free in the jungle.

Small-pox.

59. Vaccination has greatly mitigated the terrors of small-pox. In three out of the twenty years 1886—1905, slightly over a hundred deaths occurred; in three other years, *viz.*, 1888, 1894 and 1895, the incidence was more severe, 305, 304 and 1070 deaths respectively having resulted, the ratio for the last mentioned year being 1·43 per mille. In an ordinary healthy season the mortality from this cause does not usually exceed fifty a year. Small-pox generally appears at the beginning of the hot weather in March or April and lasts until the rains. This disease being looked on as a visitation of the Devī, no medical means are taken to combat it. *Nīm* leaves are spread on the floor, and festooned to the roof and over the doors. Turmeric, *nīm* leaves and oil or butter are applied to the patient's body. Food is not restricted; rice, sago, *dāl*, milk and vegetables are given, but salt, flesh, oil and condiments are prohibited. Offerings such as cocoanuts, foodstuffs and clothing are made to the Devī; goats are also sacrificed or set free at her shrine. In former times when epidemics were more frequent the custom of setting free a scapegoat, as in the case of cholera, was followed.

Bowel complaints.

60. Bowel complaints (dysentery and diarrhœa) are most prevalent towards the end of the rains, and especially so during seasons when the rainfall is heavy. The mortality is usually from 4 to ·5 per mille per annum. The average annual

number of deaths for the decade ending 1895 was 2931 and for the next decennial period 3558.

Other diseases.

61. Except during periods of famine Lathyrism-paralysis from the consumption of *tiurā dāl* is rare. Guinea-worm, though endemic in the neighbouring District of Damoh, is only occasionally met with in this District. Elephantiasis is very rarely seen and the cases are generally imported. Tuberculosis appears to be on the increase in the larger towns, and this is probably due to over-crowding and the struggle for existence in these populous centres. There is no evidence that cancerous disease is common or on the increase. Leprosy is not very prevalent; in 1901 the District contained 71 lepers, 36 males and 35 females.

Plague.

62. Plague broke out for the first time in December 1902 and continued to prevail until April 1903, attacking the three large towns of Jubbulpore, Murwāra and Panāgar with 108 smaller towns and villages and causing 7360 deaths. It appeared again in September 1903 and continued until May of the succeeding year. The next epidemic occurred in August 1904 and did not cease until May 1905. The fourth invasion by this disease commenced in September 1905 and disappeared in April 1906. This epidemic was less extensive and less virulent than the preceding ones. Since the commencement of the first outbreak in December 1902 until the end of the last in April 1906, the total mortality from plague has been 14,333.

Language.

63. The language of the District is Hindi which is spoken by 660,000 persons or 97 per cent. of the District population. The most prevalent dialect is Bagheli, which is spoken in its purity in the north-east of the District. In the remaining area it more and more approaches the Bundeli of Pannā, Damoh and Narsinghpur. Some distinctive points of Bagheli noted by Dr. Grierson are that the ante-penultimate vowel is shortened in inflection, as *chākar* a servant, *chak*(*a*)*ranse* from the servants. There is a tendency to change *w* to *b* as *ābā* he came, *jabāb* an answer. The locative termination is *mā* instead of *men*. The genitive of the personal pronoun is *mor*, *tor*. 'Own' is *apan*, oblique *ap*(*a*)*ne*, not

apnā. The termination of the future is formed with an *h* as *kahihaun* 'I will say.' In the first person plural the termination is however *b* as *ham kahab* 'we will say.' The expletive *tai* is added to the past tense of verbs, as *det-rahā-tai*, 'he was giving.' As stated above this District is the meeting place of the two dialects and this has given rise to a peculiar mixture, which looks like a compromise between them; for example *chalo gā* 'went away' is neither Bagheli nor Bundelī. In the former it would be *chalā gā* and in the latter *chalo gao*. Similarly *pardes mā* 'in a foreign country' is a compromise between the Baghelī *pardyās mā* and the Bundelī *pardes men*. Unlike Bundelī there is not much literature in the Baghelī dialect. The Mahārājās of Baghelkhand within the last century have, however, honoured the dialect which takes its name from their country by composing some books in it.

Urdū is spoken by about 7000 persons or a fifth of the Musalmāns found in the District. Gondī is spoken by a small fraction of Gonds; only 5000 out of 79,000 persons belonging to that tribe returned themselves at the last census as speaking their original language. Others speak Hindī of the locality they live in. There are a number of Kols (46,000) but they have also abandoned their language and speak the dialect of their neighbours. Jubbulpore being a military station, there are here as many as 2200 speakers of English, second only to Nāgpur, where their number is 2900. For the same reason the District possesses a thousand speakers of Tamil and Telugu each. The Marāthā occupation brought in a number of Marāthā families as permanent residents and hence Marāthī was returned by about 1700 persons. Trade has brought in a number of Mārwāris, whose language also is called Mārwāri, and is spoken by 1300 persons.

64. Of the total population 62 per cent. are supported by pasture and agriculture as against the provincial average of 72½. This low proportion is to be explained by the fact that Jubbulpore, like the other Northern Districts, has a large number of persons engaged in personal service and also that the village artisans are more

Occupation.

numerous than in other parts of the Province. As in other Northern Districts social life in the interior is somewhat more developed and agriculturists get work done for them by the hereditary village servants, which elsewhere they do for themselves. The agricultural element includes 270,000 landlords and tenants, equivalent to about 40 per cent. of the population, while agricultural labourers number 134,000 or nearly 20 per cent. of the population. The number of persons supported by personal service is 29,000 and the proportion of servants to the total population (4 per cent.) is exceeded only in Saugor, Narsinghpur and Hoshangābād. Personal and domestic servants are 25,000 or 3·7 per cent. of the population, barbers, washermen and water-carriers being the most numerous of this class. The number of persons supported by the preparation of articles of food and drink is also fairly large, being 33,000 or about 5 per cent. of the total population. The principal classes among these are sellers of milk and *ghī* (clarified butter), grain and pulse dealers, vegetable and fruit sellers and salt sellers. The number of grain and pulse dealers, of betel leaf sellers and of tobacco manufacturers and sellers is the highest in the Province, while the number of vegetable and fruit sellers is exceeded only in Raipur. The manufacture and sale of textile fabrics supports 28,000 persons or 4 per cent. of the total population, 19,000 of these belonging to the cotton industry. Of these 19,000 about 1300 persons are engaged in cotton mills and the remainder work in their own homes. The pottery industry supports 8000 persons, the pottery works of Jubbulpore making an important contribution. Over 10,000 persons draw their living from metals and precious stones; about half the number are workers in iron and about 4000 in gold and silver and precious stones. The leather industry is responsible for 12,000 persons, while of 13,000 employed in wood and cane work 8600 are supported by cane work and matting and 4000 are carpenters. The number of collectors and sellers of lac is 1000 persons or the highest in the Province. Under transport 3000 are employed in railway service, 3600 as cart owners, drivers, &c., and 3000 as drivers and owners of pack animals. Excluding Hoshangābād this District recorded the highest number (7000) of persons engaged in religious

services, while in respect of medical practitioners without diploma (99) this District ranks fourth. Music, acting and dancing support about 700 persons. Unskilled labour (not agricultural) employs 30,000 people, of whom 22,500 are engaged in general labour and 7000 on earthwork such as well-sinking, tank-digging, etc. There are 10,600 mendicants who are not connected with any religious order.

RELIGION.

Statistics.

65. The statistics of religion show that Hindus constitute 88 per cent. of the population, Muhammadans about 6 per cent. and Animists 5 per cent. The District has 6177 Jains and 3688 Christians.

Village gods.

66. There are a number of village gods to whom practically all classes of the population pay reverence, and the principal of whom are the following:—Khermāta is the goddess of the earth or the village, and is sometimes treated as a local incarnation of Devī, this being no doubt the work of Brāhman priests. She has a small hut and an image of Devī either black or red. She is worshipped by a priest called Pandā or Bhumia, who may be of any caste except the impure castes. When an epidemic of cholera breaks out, the Pandā performs the following ceremony to avert it. He takes a kid, and a small pig or chicken, and some cloth, cakes, glass bangles, vermilion, earthen lamp, and some country liquor, which is sprinkled all along the way from where he starts to where he stops. Lampblack is put under the eyes of the kid and a *tiklī* (glass spangle) affixed to its forehead. The Pandā proceeds in this manner to the boundary of the village, at a place where there are cross-roads and leaves all the things there. Sometimes the animals are sacrificed and eaten. While the Pandā is doing this, every one collects the sweepings of his house in a winnowing fan and throws it outside the village boundary, at the same time ringing a bell continuously. The Pandā must perform his ceremony, which is called *nikāsi*, at night, and, if possible, on the day of the new moon. He is accompanied by a few other low-caste persons called Gunias. A Gunia is a person who can be possessed by a spirit in the temple of

Khermāta. When possessed he shakes his head up and down violently, and foams at the mouth, and sometimes hangs his head on the ground. Another favourite godling is Hardaul, who was the brother of Jujhār Singh, Rājā of Orchhā, and was suspected by Jujhār Singh of loving his wife, and poisoned in consequence by his orders. 'The mur-'der created much sensation, and shrines were erected to 'propitiate his ghost at many places between the Jumna and 'the Nerbudda. Previous to 1817 his worship had been con-'fined to a few people in Bundelkhand. But when the cholera 'appeared in Lord Hasting's army during the Pindāri war, 'the camp happened to be pitched at Chandpur Sonari on the 'Sindh, near a grove of trees, beneath whose shade lie the 'ashes of Hardaul Lāla under a small shrine. The ghost of 'the murdered prince is said to have been especially incensed 'by the slaughter of a cow for beef, and from that time the 'cholera spread all over India. Then temples were every-'where erected and offerings made to appease him.'[1] Hardaul is chiefly worshipped as a cholera god and also honoured at weddings and in the months of Bhādon (Badi Amāwas) and Asārh. Hardaul has a platform and sometimes a hut with an image of a man on horseback carrying a spear in his hand. The shrine is decorated with a flag and is always outside the village. Two days before the arrival of a wedding procession, the women of the family worship Hardaul, and invite him to the wedding. Hanumān is a favourite deity, and his shrine, consisting of a slab with an image of a monkey in half relief and coloured in red vermilion, is seen everywhere. Dūlha Deo is worshipped in some villages. He was a young bridegroom who was carried off by a tiger on his wedding or according to another account was turned into a stone pillar by a flash of lightning. Before the starting of a wedding procession, the members go to Dūlha Deo and offer a pair of shoes, and a miniature post and marriage crown. On their return they offer a cocoanut. Dūlha Deo has a stone and platform to the east of the village, or occasionally an image of a man on horseback like Hardaul. Mirohia is the god of the field boundary. He never has a shrine erected to him but every tenant, when he begins sowing and cutting

[1] Cunningham's Archæological Reports, Vol. XVII, page 163.

the crops, offers a little curd and rice and a cocoanut, laying them on the boundary of the field and saying the name of Mirohia Deo. It is believed among agriculturists that if this godling is neglected, he will flatten the corn by a wind or cause the cart to break on its way to the threshing-floor. Ghatoia is located on the crossing of a river or nullah, in the shape of a round stone on a platform. A cocoanut and flowers are offered to him. A bride going to her husband's house for the first time must on no account neglect to worship Ghatoia, or she will infallibly fall ill. Pregnant women should also bow before his shrine whenever they see it. Nāg Deo or the cobra is worshipped on Nāg Panchamī. If there is a shrine all the people go there, and offer betel-leaf mixed with milk and boiled wheat. If there is no shrine they go to a snake hole or *bāmi* and worship him there, or make an image of a cobra on the wall with *ghī* or cowdung and worship that. To see a snake on Nāg Panchamī is regarded as a good omen, and on that day many Nāths carry about snakes in their baskets from door to door, and the people worship them, and give a pice or two to the Nāth. Thākur Bāba is found in villages which have often changed hands. He is represented by a stone and the mālguzār before realizing the rents goes to Thākur Bāba and invokes his permission. The first rent is collected near the Thākur Bāba and placed before him for a short time.

Magical rites for small-pox.

67. Sitalā Devi is the goddess of small-pox, and when anyone is sick with small-pox the goddess is believed to have entered the house in which he is and to be present in it. Consequently it is held as sacred and at the same time in a manner tabooed. The people of the house do not go to any other house or allow persons from another house to enter theirs. A branch of the *nīm* tree (*Melia indica*) is hung over the door to show that there is small-pox in the house. The *nīm* is the special tree of this goddess and she is supposed to reside in it. In the morning the road in front of the house is swept and water is sprinkled over it. One of the inmates then bathes and goes in his wet clothes carrying a vessel of water and offers it to the goddess. Fire is kept continually burning on the earthen cooking-place,

and a lamp is always kept alight by the sick person and must be fed with vegetable and not with kerosine oil. Anybody who comes into the house must take off his shoes and wash his feet, and a Brāhman must not come in at all, as it is thought that his presence would cause the goddess to manifest herself more strongly and make the sufferer worse. A woman in her menstrual period must not enter the house, as it is believed that if she sees the sufferer, he will get cataract in his eyes. Both the father and mother practise various rules of abstinence. The father must not wear shoes, shave, eat betel-leaf, smoke or drink liquor. The mother must abstain from eating salt, chillies, turmeric and *ghī*, must not wear ornaments or dress her hair, and must sleep on the ground. No male member of the family enters the patient's room without washing himself and sprinkling his clothes with water. The room must not be swept with a broom but only rubbed with a cloth. When the patient has recovered, the goddess is worshipped and a cradle and a blank sheet of paper are offered to her with cocoanuts, cakes fried in butter, rice boiled in milk, curds and *nīm*-leaves. A blank sheet of paper is probably included in order that the sufferer's face may similarly be free from marks. If the disease attacks the eyes of a child the mother offers a pair of silver eyes to the goddess in order to save them.

Festivals.

68. *Tīja.*—The 'Tija' festival takes place on the 3rd day of Bhādon Sudi (June-July). Married women fast for the whole twenty-four hours without drinking or eating. They pass the night singing songs of praise to Mahādeo and Pārvatī, and next morning bathe early and take their food after worshipping Mahādeo. This is supposed to save them from widowhood.

The Jawāras.—The sowing of the 'Jawāras' takes place during the first nine days of the months of Kunwār and Chait (corresponding roughly to September and March). On the first day a small room in the house is cleaned and white-washed. Some earth is then brought from the fields and mixed with manure in a basket. A male member of the family sows wheat in the basket, bathing before he does so. The basket is placed in the room prepared for it, which is called the *diwāla* or temple, and the same man attends on it through-

out the nine days, fasting all day and eating only milk and fruit at night. A lamp is kept continually burning in the room, and fed with *ghī* instead of oil, the wick being ignited by a flint, and not with fire kindled in the ordinary way, as this is blown by the mouth and therefore considered impure. During the period of nine days, called the *naorātra*, the plants are watered, and long stalks spring up. On the 8th day the *hom* ceremony is performed, and the *gunias* or devotees are possessed by Devi. On the evening of the 9th day the women putting on their best clothes walk out of the houses with the pots of grain on their heads singing songs in praise of Devī. The men accompany them beating drums and cymbals. The devotees pierce their cheeks with long iron needles, and walk in the procession. High-caste women, who cannot go themselves, hire the barber's or waterman's wife to go for them. The pots are taken to a tank and thrown in, the stalks of grain being kept and distributed as a mark of amity. The wheat which is sown in Kunwār gives a forecast of the spring crops. A plant is pulled out, and the return of the crop will be the same number of times the seed as it has roots. The woman who gets to the tank first counts the number of plants in her pot, and this gives the price of wheat in rupees per *mānī*[1]. Sometimes marks of red rust appear on the plants, and this shows that the crop will suffer from rust. The ceremony performed in Chait is said to be a sort of harvest thanksgiving. On the 9th day of the Kunwār ceremony another celebration called 'Jhinjhia' or 'Nortā' takes place in large villages. A number of young unmarried girls take earthen pots and, making holes in them and placing lamps inside, carry them on their heads through the village singing and dancing. They receive presents from the villagers, with which they hold a feast. At this a small platform is erected, and two earthen dolls, male and female, are placed on it; rice and flowers are offered to them and their marriage is celebrated.

Other festivals.

69. The *aonlā* tree (*Phyllanthus Emblica*) is regarded as sacred and is worshipped on the 9th day of Kārtik Sudi (light fortnight

---

[1] A measure of 400 lbs.

of October—November). Members of the higher castes go and take their food under the tree and feed Brāhmans under it. If a man has cheated somebody out of some property, and goes and takes his food under the *aonlā* tree he is freed from his sin. Feeding under the *aonlā* tree on this day is believed to be a means of going to heaven. Cattle are worshipped at Diwāli (15th Kārtik Badi). Their horns are coloured and patches of green dye are daubed on their bodies and bunches of the fibrous roots of the *palās* tree (*Butea frondosa*) are tied to their horns. This is the one day of the year on which all cattle are given salt, and also a feed of grain and pulse. The Ahirs dress up, and go round singing and dancing to the houses of the persons whose cattle they graze, where they are given a present.

The Holi.

70. The Holi festival falls on Phāgun Sudi 15th (February—March), and is the end of the Hindu year. A large bonfire is made and worshipped, and obscene songs are sung. The fire from the bonfire burnt at the Holī is taken home, and in some houses kept alight the whole year. In the centre of the bonfire a post is planted with a flag, and the direction in which it falls is taken as an omen. East and west are lucky directions, south unlucky, and north neutral. If the flag burns and floats up into the air, a severe famine is indicated. An amusement among the low castes is as follows:—A long slippery pole is placed in the ground, and a bag of *gur* (unrefined sugar) and a rupee are tied to the top of it. The women stand round the pole with long bamboos in their hands to defend it, while the men try to climb the pole, and are beaten by the women. They hold sticks tied in the shape of a cross-bar in their hands to defend themselves. The man who first manages to climb the pole takes the rupee, while the sugar is distributed among the people.

Agricultural superstitions.

71. The commencement of agricultural operations takes place at *Aktī*, or the 3rd day of the light fortnight of Baisākh (April—May). On this day in the Murwāra tahsīl early in the morning before sun-rise each tenant goes to his field, washes his plough with water and affixes a patch of *sendur* to it. In the Sihorā and Jubbulpore tahsils the practice is a little different. All the tenants assemble at the house of

the mālguzār and they go together to a field. An unmarried girl leads the way taking a lighted earthen lamp placed on a brass pot filled with water on her head. She is followed by a farm-servant with a new plough on his shoulder and a pair of bullocks led by a rope. On reaching the field the *pandit* or Brāhman priest sprinkles some water over the share of the *bakhar*, and covers it with cowdung and turmeric. Some grains of til, mūng, urad, juār and other crops are then placed on the *bakhar* together with a rupee, and the mālguzār worships it. The mālguzār then puts his arms round the share and takes up the rupee with the grain and earth. The grain is sprinkled over the field which is ploughed with the *bakhar*. Each man then tries to pick up a clod with some grain in it, and, taking it home, places it in his threshing-floor. Each tenant also ploughs a little in his own holding, it being necessary to drive an odd number of furrows facing east or north. This ceremony is called *Harait kā sudin*. In the Murwāra tahsil before the commencement of the *kharīf* sowings the village Bhumia, generally of the Kol or Bharia caste, comes to the house of the mālguzār and receives from him about 2 *kuros* of *dhān* and kodon. This grain is distributed by him to all the tenants of the village, who give him a present. The grain given by the Bhumia is carefully kept and mixed up with the seed-grain, the tenants thereby hoping to get a bumper crop. Another practice obtaining in the Murwāra and Sihorā tahsils is for the cultivator before taking the seed for sowing to prepare five or seven small bins (*pālā*) of cowdung and fill them up with seed grain and worship them. After the completion of the *rabi* sowings the plough is worshipped and the farm-servants are given a feast. In some hilly villages before harvesting the crops a sacrifice of a pig is made in the name of Bhīmsen. Every cultivator leaves a portion of each field uncut: this is called *bahronā* or something which will add to the produce of the crop.

The threshing of the produce is also a solemn affair. To the central pole (*mendh*) of the threshing floor is tied a bundle of sheaves cut from *bahronā*. On the stack of the threshed grain cakes of cowdung especially prepared at the Diwāli festival are placed. From the stack is taken some grain which is made into flour, and cakes are prepared there-

from. These cakes are offered to the deity of the threshing floor. The direction to which the measurer of the grain should face is fixed by a Brāhman. The measurer should on no account speak at the time of measuring. No person with shoes on is allowed to enter the threshing floor.

The Gonds are said to divine the rain in the following manner :—At the *Aktī* festival they place four clods of earth in the name of four months and over them they place a pot full of water. Next day they examine the clods and if any clod remains dry they conclude that there will be no rain in the month the name of which the clod bears. To stay heavy rains the agriculturists of the Sihorā tahsīl have recourse to the following device :—On a piece of paper they write the names of 21 one-eyed persons and of 22 weighmen and place it in a pot filled with water. This is then buried on a cross road with the following *mantra* : '*Ikais kanwā bāis bayā ; Phūt phāt bādal gayā*' which may be rendered thus, 'Twenty-one blind persons and twenty-two weighmen ; the clouds separated and disappeared.' The one-eyed persons are supposed to represent *rākshasas* or demons. The introduction of the weighmen is due to the belief that they will measure the water and reduce its quantity. If the wheat or rice crop is infested by *sānbhar* (black insect) in the Haveli tract of the Sihorā tahsīl the Bhumia of the village walks round the field affected and buries a bell-metal cup (*belā*) in one of its corners.

Some of the local remedies for cattle diseases are interesting. If maggots breed in a buffalo or a horse a remedy is to throw some mare's milk into the wound of the buffalo and some buffalo's milk into the wound of the horse, the idea being that a horse is the natural enemy of a buffalo. Another local remedy for removing maggots from cattle is to tie a feather of the blue-jay or a skull of a dog to the neck of the animal or to cut some hair from the animal's tail and tie it to a branch of the pipal tree. On the day of Diwāli it is the custom to bring *kusa* grass and *bajarkand* (a fruit) and tie it at the door of the cattle stall. It is believed that the cattle passing under it will be immune from disease for the next twelve months. *Urai* grass is used for sweeping the threshing floor ; if ordinary brooms are used the grain will be eaten up by insects.

Superstitions regarding animals.

72. 'Throughout India', Mr. J. D. E. Holmes writes[1], 'among the native population, the 'value of a horse or ox principally 'depends on the existence and situa'tion of certain hair marks on the body of the animal. 'These hair marks are formed by the changes in the 'direction in which the hair grows at certain places, and, 'according to their shape, are called a crown, ridge, or 'feather mark. The relative position of these marks is 'supposed to indicate that the animal will bring good luck to 'the owner and his relatives. So much are the people in'fluenced by these omens that they seldom keep an animal 'with unlucky marks, and would not allow their mares to be 'covered by a stallion having unpropitious marks.' A few of the local superstitions of the District regarding bullocks are described below. A bullock having a white serpentine line (*nāgin*) on its backbone is considered inauspicious. Other unlucky bullocks are :—*Pharkā pelan* or a bullock having straight horns; *Mūsarhā* or one having at the end of its tail a bunch of hair both black and white; *Mūndhā* or one having unpointed horns; *Phulhā* or one which is white-spotted; *Murār* or one which has one of its horns pointed and the other unpointed; *Jhappan* or one which never shakes its tail; *Chhadar* or one having only six teeth instead of eight; *Gobartūr* or one which has a small ball of flesh below its tail; *Sīng halāwan* or one which can shake its horns; and *Bāndā* or one which has its tail so small as to be above the knees. A local proverb says:—

Sīng halāwan pharkā pelan tain kanhān jaihe bāndā re
Main to jaihon khāny gusainyān sār halaihon dāndā re,

which may be translated, 'The horn-shaker bullock and the straight-horned bullock asked the short-tailed bullock where he was going. The latter replied, 'I go to make a meal of the master and a dessert of his cattle stall.' Another local proverb is :—

Mūndhā kahe Murār se chal jhappan ghar chaliye
Ghar gusainyan nā mile to khed parosī khaive,

i.e., *Mūndhā* says to *Murār* 'Let us go to the house of *Jhappan* and if his master does not meet us at his house we will pursue his neighbour and eat him up.'

[1] Madras Agricultural Bulletin II, 42, 1900.

Hindu sects. Kabīrpanth.

73. There is not much sectarianism in the Jubbulpore District The only noticeable sects are the Kabīrpanthis and the Satnāmis, but the latter are quite distinct from the Chamār sect of Chhattīsgarh. The Jubbulpore sect was started by a Kshattriya Jagjīwan Dās of the United Provinces long before the Chamār reformer introduced his new religion into Chhattīsgarh. Some 47,800 persons returned themselves as Kabīrpanthis from the District at the census of 1901. The founder of the sect was Kabīr (1380—1420 A.D.), who carried on and extended the work of his master, Rāmānand. In his teaching Kabīr set himself against the whole body of Hindu superstitions. 'He 'rejects and ridicules,' says Barth,[1] 'the Shāstras and 'Purānas; he severely chastises the arrogance and hypocrisy 'of the Brāhmans; he rejects every malevolent distinction of 'caste, religion, and sect. All who love God and do good 'are brothers, be they Hindus or Musalmāns. Idolatry and 'everything which approaches to it or may suggest it, is 'severely condemned; the temple ought to be only a house of 'prayer. He tolerates among his disciples neither practices 'that are too demonstrative, nor singularities of costume, 'nor any of those external marks which are the distinctive 'badges of the Hindu sects, and which serve only to divide 'men. Yet, not to scandalise a neighbour, he enjoins on 'them conformity to usage in different matters. He recom-'mends renunciation and a contemplative life, but he de-'mands, above all, moral purity, and does not restrict it to one 'particular kind of life.' 'The Kabīrpanth exists as a protest 'against the religious exclusiveness of the twice born castes. 'As a natural result few but Sūdras whose cause it champions 'have associated themselves with the movement.'[2] The head of the faith in this part of the country resides at Kawardhā, the chief town of the State of the same name. The Mahants of Kawardhā claim to be the direct descendants of Dharamdās, a Kasaundhan Baniā who distributed the whole of his wealth, eighteen lakhs of rupees, in charity at Kabir's bidding and became a *fakīr*. In reward for this Kabir promised

[1] 'Religions of India' page 239.

[2] Westcott's Kabir and the Kabir Panth, page 107.

him that his family should endure for forty-two generations. At present there are two Mahants Dhirajnām Sāhib and Ugranām Sāhib, both of whom claim to be the legitimate possessors of the *gaddī*. Both of them have left Kawardhā though the old seat has not been formally abandoned. Ugranām has fixed his headquarters at Kudarmāl in Bilāspur District and Dhirajnām lives at Dāmakherā in Raipur District. The head of the faith appoints a certain number of deputies called Bhandāris or Mahants from the more advanced of his followers; these Mahants are spread all over the country. In addition there are a number of hereditary lieutenants of the chief Guru with fixed seats or *gaddīs* in various places. These have in many cases become independent owing to the quarrels of the two Mahants at the parent *gaddī*. In fact things have now come to such a pass at least in the Jubbulpore District that the followers of the faith do not even know who the Kawardhā Mahants are and they recognise local Mahants as the head of the sect. Besides local Mahants the Kabīrpanthis have an itinerant order of ascetics who travel about asking for alms and reciting the precepts of their faith. With this organization a good many people belonging to the lower orders of Hindus are annually converted to Kabirism. The initiation of a Kabīrpanthī is called *chaukā*. A pot of water is placed on the ground with a lamp over it, and songs are sung in praise of Kabir to the music of cymbals. A *bīra* consisting of *pān*, *gur*, and a little of the core of the cocoanut, is eaten by the person to be initiated and each member of his family and a *mantra* or sacred verse is whispered in his ear. A *kanthī* or small garland of beads is tied round his neck and the initiation is complete. At death the ceremony is repeated with the exception of the omission of the sacred verse. The Kabīrpanthis are forbidden to eat meat, to drink liquor or to worship idols. But many of them do not adhere to these precepts. An annual fair is held at Kudarmāl in honour of Kabīr.

Muhammadans.

74. Muhammadans number 38,000 persons or about 6 per cent. of the population, of whom 23,500 live in towns. They own 81 villages in the District and the largest number of Muhammadans (21,000) live in Jubbulpore. 36,500 persons are

returned as Sunnis, 600 as Shiahs and for 900 persons no sect has been returned. A number of the Muhammadans are Bahnās or cotton carders, and Rangrez or dyers, whose beliefs and practices are mainly Hindu, though they have submitted to the rite of circumcision and have begun to pray in a mosque instead of in a temple. 'Caste as an institution 'is entirely alien to the spirit of Islām, which has never raised 'any scruples about the class of women who can be taken as 'wives, or the choice of occupation which its followers may 'adopt. The strength of Islām lies in its levelling and demo-'cratic character, just as that of Brāhmanism lay in its conceit 'and arrogance.'[1] Nevertheless the lower classes of Muhammadans, generally converts from Hindus, have retained their caste names and continue to prohibit intermarriages with other fraternities.

'Stated broadly, the religious practice of Indian Muham-'madans,' says Professor Oman[2] 'consists largely in pilgrim-'ages to the tombs of saints. It is true that the regular 'call (*asān*) to prayer rises five times each day from the 'proud minarets of the mosques in every city of the land, 'but, as in Christian Europe, only a small minority observe 'strictly the obligations of their faith. The great majority 'are heedless of the *asāns* and the services in the *masjid*, 'neglect all private devotions, and do not go beyond an 'attendance at the mosque twice a year on the occasions of 'the two principal Islāmia festivals, Idul-azhā[3] and the Idul-'fitr.'[4]

'The religious observances of Indian Musalmāns have 'little of the noise and bustle which are associated with so 'many of the Hindu religious festivals. But once every year 'in the month of Muharram which is the first month of the 'Muslim year, the Muhammadans of the Shiah sect appear in 'a new and impetuously demonstrative aspect, filling the 'streets of the principal Indian cities with a certain regulated

[1] Nesfield's 'Brief View of castes,' page 122.

[2] 'The Brahman, Theists and Muslims of India', page 281.

[3] *Idul-azhā* or *Id-i-Zuhā* 'the feast of sacrifice' is a part of the rites of the annual pilgrimage to Mecca, and it is also observed throughout the Muhammadan world as a great festival.

[4] *Idul fitr*, 'the festival of the breaking of the fast', which follows the great fast of the Ramzān, is especially one of almsgiving.

'uproar of which the keynote is fanatical, yet well-disciplin-'ed lamentation.'

The Muharram is sacred to the martyrdom of Hasan and Husain, the sons of Alī by Fātimah, a daughter of the prophet Muhammad. The Shiahs reckon Alī as the immediate successor of Muhammad and disallow the succession of the three companions of Muhammad. Hasan was murdered by poison and Husain was killed at Karbalā fighting desperately under circumstances both touching and dramatic. The battle commenced on the 7th of Muharram and lasted for three days. The *tāzias* of the Muharram are representations of the tomb of Husain. Of the ten days of the Muharram celebrations, nine are devoted to lamentation and on the tenth day the *tāzias* are paraded about the streets with music and torches and then taken to a river or tank to be thrown in.

A peculiar institution of the Muharram is Nāl Sāhib, a horse-shoe tied to the top of a pole. The Nāl is believed to be the shoe and representative of Kāsim's charger. 'A Shiah 'belief is current that when the band of Holy Karbalā martyrs 'was besieged and hemmed in within their intrenched camp 'by the merciless Ubaidullah-ibni-Zaid, a marriage between 'Kāsim, the youthful nephew of Husain, and Husain's little 'daughter, the lady Sakinah, was stopped by the slaughter 'of the bridegroom. Some Deccan Musalmāns came into the 'possession of the cast shoe of the bridegroom's horse. They 'brought it to India and during the Muharram when the 'relics of the Karbalā are exposed to view Lord Horseshoe or 'Nāl Sāhib, in which dwells something of the bridegroom's 'spirit, works miraculous cures. It follows that the holder 'of Lord Horseshoe may receive into him the spirit or *hāl* of 'the bridegroom.'[1] During the Muharram a fire is kindled in a hole and people walk around it crying *Dūla Dūla*. If any person is believed to have been inspired by the bridegroom's spirit the people around keep up a chorus of *Dūla Dūla Dūla Dūla* to the measure of which the person sways at first in gentle and by degrees in more violent oscillations. When the full power of the breath or *hāl* fills the devotee, that is when his eye-balls turn up and become fixed in a

[1] Bombay Gazetteer, Vol. IX, Part II, page 138.

stony stare and his body grows cold, he is made to keep his face bowed among the peacock feathers. After his face has been for some time pressed in the feathers the spirit seizes him and he rushes heedless of water or of fire. As he starts one of his friends holds him from behind supporting and steadying him. He guides the *Dūla's* aimless impulse to the place or *akhāras* of other *Dūlas* and *tāzias* where incense is burnt before his face. On his way from place to place the *Dūla* is stopped by wives praying for the blessing of children or the removal of a rival or the casting out of a *jinn* or other evil spirit. To secure a son the *Dūla* generally directs a flower or two to be picked from the jasmine garlands that deck his shoe-rod. On returning to his own place the *Dūla* falls senseless and after remaining senseless for some time regains consciousness.

At the Muharram people in fulfilment of a vow dress their children in green like religious beggars, or paint themselves as tigers. Another feature of the Muharram is that standards (*Panjās*) are carried in solemn procession. The free distribution of sugar-water (*sherbet*) is considered an act of piety and water is thrown from *mashaks* (inflated buffalo hide which is used for carrying water) before *tāziās* and Nāl Sāhib. It is believed that the spirits of the martyrs are hovering unhoused about, driven about shelterless through space. The distribution of sugar water and the throwing of water from *mashaks* is possibly done to appease the thirsty souls of the martyrs who died in the desert of Karbalā. The painting of bodies in the form of a tiger is emblematical of the strength of the martyrs displayed on the field of battle.

Christians. Statistics.

75. Of a total number of 3688 Christians returned in 1901, 2044 were Europeans and Eurasians and 1644 natives. The number of native Christians increased by 1039 persons between 1891 and 1901. The distinction between Europeans and Eurasians in the census tables is valueless. The returns of sect show that 1724 persons belonged to the Anglican Communion, 1286 were Roman Catholics, 640 persons belonged to the Methodist Church, and 38 were Presbyterians.

Jubbulpore is in the Anglican Diocese of Nāgpur and is the headquarters of a chaplain who also visits the

neighbouring stations of Narsinghpur, Mohpāni, Pachmarhī, Hoshangābād and Itārsi. Christ Church was built in 1845 and to it a high school is attached. There are 3 blocks of excellent school buildings with separate boarding and day establishments for girls and boys, and a covered gymnasium for the boys. Jubbulpore is also comprised in the Roman Catholic Diocese of Nāgpur and three outstations Mandlā, Katnī-Murwāra and Umaria, containing a Catholic population of 70, are visited from here. The Roman Catholic Church was built in 1871 and to it are attached a girls' school under the direction of the nuns of Saint Joseph from Savoy (France), a boys' school called the St. Aloysius High School and orphanages for Eurasian and native children. The staff consists of four priests and nine nuns; two of the priests are at the head of the boys' school, one is a military chaplain and the other is his assistant.

Missions.

76. Missionary work is carried on by several agencies in the District. The Church Missionary Society has been at work since 1857. In 1885 St. Luke's Mission Church was built, and the Mission also maintains a Women's Industrial Home, a Christian Boys' Hostel, St. John's Hostel for non-Christian students, a Parish school, a High school, a Sadar school and six branch schools. The attendance at the schools now numbers 1280. The outstations of the Mission are at Panāgar, Barelā, Sihorā and Nainpur. Panāgar possesses a small dispensary and Nainpur a boys' primary school. The staff consists of eight missionaries, 3 male and 5 female. It is worthy of note that three principals of the High school have been made Bishops. The Church of England Zanāna Mission started work in Jubbulpore about twenty-eight years ago. Panāgar and Barelā were made independent stations in 1906 with a resident lady missionary at each. At Panāgar the Buchanan Dispensary, built in memory of Miss Buchanan who died of cholera contracted while nursing a patient, is in the charge of a lady missionary who is a qualified doctor. The staff comprises four European missionaries, and the mission supports an orphanage at Katnī, nine schools with a roll of 339, and a home at Katnī for baptized converts. Other missions working in the District are: The Wesleyan Missionary Society,

Missionary Society of Methodist Episcopal Church, Women's Foreign Missionary Society of the Methodist Episcopal Church, and the Foreign Christian Missionary Society. The Welseyan Missionary Society maintains classes at Jubbulpore for the training of boys in weaving, carpentry and gardening. The Indian Christian Endeavour Union conducts a printing press under the supervision of Rev. O. J. Grainger at Jubbulpore. A *Trimāsik Patri* (Hindi Quarterly Magazine) is edited by Mrs. Hensley of the Church of England Society.

CASTE.

Principal castes.

77. The principal landholding classes are Brāhmans, Baniās, Gonds, Rājputs, Kurmis and Lodhis. The Baniās have acquired their villages in comparatively recent times, principally from Gonds who once ruled over the District and consequently possessed a good deal of landed property. The Brāhmans who stand next to Gonds in numerical strength possess the largest number of villages; they also had a short-lived rule in the District, when the Marāthā Pandits of Saugor ousted the Gond dynasty. Rājputs and Lodhis belonged to the soldier class and earned their landed property chiefly by military service. The Kurmis have acquired their landed property through their agricultural prosperity. All these classes except the Gonds are immigrants from the north, the oldest being Brāhmans who came from Kanauj and Tirhut in Bengal. The Lodhis came from Bundelkhand and settled on the frontier of the District, while the Kurmis emigrated from the Doâb or the tract between the rivers Ganges and Jamuna and settled in the central portions of the District which most resembled the broad and open tracts of their fatherland. The principal cultivators are also drawn from almost all these castes except the Baniā caste. Gonds, Kols and Bharias make good farm-servants. They are very ignorant and usually become bond-slaves of their employers.

Brāhman.

78. Brāhmans number 64,000 or 9 per cent. of the population and next to Gonds are the most numerous caste in the District. They are the largest proprietors owning about 80c villages or about a third of the total

number in the District. The majority of the Brāhmans belong to the Sarwaria subdivision who derive their name from the river Saryu in the United Provinces near which they live. They are allied to Kanaujias who are also fairly represented in this District. The Kanaujias take their name from Kanauj where they originally dwelt and the separation of Sarwarias from the original stock is ascribed to the period when Rāma, the hero of the Rāmayana, lived. He performed a horse sacrifice and presented betel leaves, enclosing diamonds in them, to certain Brāhmans, who without knowing what was inside them accepted them. The acceptance of a gift was considered degrading in those times, so they were angered with the king. The latter however appeased them by conferring grants of land on them. He shot an arrow as far as he could and the place where it fell was the boundary of the land. Now the name of an arrow is *sar*, so these Brāhmans were called Sarwaria. This story accounts for their being looked upon as somewhat lower than Kanaujias in the north, but in this District they claim to be superior to the Kanaujias and show many scruples in their *achār* or rule of conduct, which they consider raises them to a higher status than their brethren of other denominations. As a rule they do not eat meat as the Kanaujias do and abstain from marrying with them, though cases are known where intermarriages between the two subdivisions have taken place. The Sarwarias extort a good deal of money from the bride's party at the time of marriage, the high price of Rs. 200 or Rs. 300 being taken for the bridegroom. They do not plough with their own hands. One who does so may even lose his caste or at any rate the status which he previously enjoyed. 'Harjutā Brāhman' or the ploughing Brāhman has become a term of reproach. The other subdivisions found in the District are Sanādhya, Jijhotia Bhārgava, Marāthā and Khedāwāl Brāhmans. The first three belong to the same main group to which the Kanaujias and the Sarwarias belong, *viz.*, Panch Gaurs or Northerners, while the last two are included in the Panch Dravida group or the Southerners. The Sanādhyas are also known as Sanaurhias, but the latter is now restricted to a criminal tribe of thieves and pick-pockets. Originally the tribe consisted of bad characters from the Sanādhya Brāhmans but

now it admits men from other lower castes. The Jijhotias derive their name from Jajhauti or Jejākbhukti, the old name of Bundelkhand which finds mention in a stone inscription found at Bilahrī near Murwāra. They are regarded as lower than Kanaujias and Sarwarias. Several Marāthā Brāhman families settled in Jubbulpore when that place was made their headquarters by the Saugor Pandits who were agents of the Peshwā. The subsequent transfer of the government to the Bhonsla, popularly known as the Ghonsla, family of Nāgpur, brought in some families from that quarter also. These Marāthās had become so naturalised that they had forgotten their mother-tongue, and it is due only to the recent revival that they have acquired it again, though their intonation and mode of speaking sometimes draw forth ridicule from the inhabitants of the Marāthi-speaking Districts. The Khedāwāls came from Gujarāt. They first settled in the Damoh District whence they spread to the surrounding Districts. They are very strict in the observance of their caste rules and do not smoke but only chew tobacco. They are intelligent and shrewd business men.

A Brāhman Satī.

79. The last case of *satī* immolation which is recorded was from a Brāhman family in this District. Colonel Sleeman saw it himself and has given a graphic account of it, which is reproduced below :—

On receiving civil charge of the District (Jubbulpore) in March, 1828, I issued a proclamation prohibiting any one from aiding or assisting in *satī*; and distinctly stating, that to bring one ounce of wood for the purpose would be considered as so doing. If the woman burned herself with the body of her husband, any one who brought wood for the purpose of burning him would become liable to punishment; consequently the body of the husband must be first consumed, and the widow must bring a fresh supply for herself. On Tuesday, 24th November, 1829, I had an application from the heads of the most respectable and most extensive family of Brāhmans in the District, to suffer this old widow to burn herself with the remains of her husband, Umed Singh Upādhya, who had that morning died upon the banks of the Nerbudda. I threatened to enforce my order, and

punish severely any man who assisted ; and placed a police guard for the purpose of seeing that no one did so. She remained sitting by the edge of the water without eating or drinking. The next day the body of her husband was burned to ashes in a small pit of about eight feet square, and three or four feet deep, before several thousand spectators who had assembled to see the *sati*. All strangers dispersed before evening, as there seemed to be no prospect of my yielding to the urgent solicitations of her family, who dared not touch food till she had burned herself, or declared herself willing to return to them. Her sons, grandsons, and some other relations, remained with her, while the rest surrounded my house, the one urging me to allow her to burn, and the other urging her to desist. She remained sitting upon a bare rock in the bed of the Nerbudda, refusing every kind of sustenance, and exposed to the intense heat of the sun by day, and the severe cold of the night, with only a thin sheet thrown over her shoulders. On Thursday, to cut off all hope of her being moved from her purpose, she put on the *dhujjā* or coarse red turban, and broke her bracelets in pieces, by which she became dead in law and for ever excluded from caste. Should she choose to live after this, she could never return to her family. Her children and grandchildren were still with her but all their entreaties were unavailing ; and I became satisfied, that she would starve herself to death if not allowed to burn, by which the family would be disgraced, her miseries prolonged, and I myself rendered liable to be charged with a wanton abuse of authority, for no prohibition of the kind I had issued had as yet received the formal sanction of the Government.

On Saturday, the 28th, in the morning, I rode out ten miles to the spot, and found the poor old widow sitting with the *dhujjā* round her head, a brass plate before her with undressed rice and flowers, and a cocoanut in each hand. She talked very collectedly, telling me, that 'she had determined to mix her ashes with those of her departed husband, and should patiently await my permission to do so, assured that God would enable her to sustain life till that was given, though she dared not eat or drink'. Looking at the sun, then rising before her over a long and beautiful reach of the Nerbudda river, she said calmly, 'My soul has been for

five days with my husband's near that sun—nothing but my earthly frame is left and this I know you will in time suffer to be mixed with the ashes of his in yonder pit, because it is not in your nature of your usage wantonly to prolong the miseries of a poor old woman'. 'Indeed it is not, my object and my duty is to save and preserve them; and I am come to dissuade you from this idle purpose—to urge you to live, and to keep your family from the disgrace of being thought your murderers'.

'I am not afraid of their ever being so thought, they have all, like good children, done everything in their power to induce me to live among them; and if I had done so, I know they would have loved and honoured me; but my duties to them have now ended. I commit them all to your care, and I go to attend my husband, Umed Singh Upādhya, with whose ashes on the funeral pile mine have been already three times mixed'.

This was the first time in her long life that she had ever pronounced the name of her husband, for in India no woman high or low ever pronounces the name of her husband—she would consider it disrespectful towards him to do so. When the old lady named her husband, as she did with strong emphasis, and in a very deliberate manner, every one present was satisfied that she had resolved to die. 'I have,' she continued, 'tasted largely of the bounty of government, having been maintained by it with all my large family in ease and comfort upon our rent-free lands; and I feel assured that my children will not be suffered to want: but with them I have nothing more to do, our intercourse and communion here end. My soul (*prān*) is with Umed Singh Upādhya; and my ashes must here mix with his.' Again looking to the sun—'I see them together', said she, with a tone and countenance that affected me a good deal, 'under the bridal canopy:' alluding to the ceremonies of marriage; and I am satisfied that she at that moment really believed that she saw her own spirit and that of her husband under the bridal canopy in paradise.

I tried to work upon her pride and her fears. I told her that it was probable that the rent-free lands by which her family had been so long supported might be resumed by the government, as a mark of its displeasure against the children

for not dissuading her from the sacrifice, that the temples over her ancestors upon the bank might be levelled with the ground, in order to prevent their operating to induce others to make similar sacrifices; and lastly, that not one single brick or stone should ever mark the place where she died, if she persisted in her resolution. But if she consented to live, a splendid habitation should be built for her among these temples—a handsome provision assigned for her support out of these rent-free lands—her children should come daily to visit her, and I should frequently do the same. She smiled, but held out her arm, and said 'My pulse has long ceased to beat—my spirit has departed—and I have nothing left but a little earth that I wish to mix with the ashes of my husband. I shall suffer nothing in burning; and if you wish proof, order some fire, and you shall see this arm consumed without giving me any pain.' I did not attempt to feel her pulse but some of my people did, and declared that it had ceased to be perceptible. At this time every native present believed that she was incapable of suffering pain; and her end confirmed them in their opinion.

Satisfied myself that it would be unavailing to attempt to save her life, I sent for all the principal members of the family, and consented that she should be suffered to burn herself if they would enter into engagements that no other member of their family should ever do the same. This they all agreed to, and the papers having been drawn out in due form about mid-day, I sent down notice to the old lady, who seemed extremely pleased and thankful. The ceremonies of bathing were gone through before three, while the wood and other combustible materials for a strong fire were collected and put into the pit. After bathing, she called for a *pān* (betel leaf) and ate it, then rose up and with one arm on the shoulder of her eldest son, and the other on that of her nephew, approached the fire. I had sentries placed all round, and no other person was allowed to approach within five paces. As she rose up, fire was set to the pile, and it was instantly in a blaze. The distance was about one hundred and fifty yards, she came on with a calm and cheerful countenance—stopped once, and casting her eyes upward said 'Why have they kept me five days from thee, my husband!' On coming to the sentries her supporters stopped—she walked

once round the pit, paused a moment ; and while muttering a prayer threw some flowers into the fire. She then walked up deliberately and steadily to the brink, stepped into the centre of the flame, sat down, and leaning back in the midst as if reposing upon a couch, was consumed without uttering a shreik or betraying one sign of agony ! A few instruments of music had been provided, and they played as usual as she approached the fire, not as is commonly supposed, in order to drown screams but to prevent the last words of the victim from being heard, as these are supposed to be prophetic, and might become sources of pain or strife to the living. It was not expected that I should yield, and but few people had assembled to witness the sacrifice, so that there was little or nothing in the circumstances immediately around to stimulate her to any extraordinary exertions ; and I am persuaded that it was the desire of again being united to her husband in the next world, and the entire confidence that she would be so if she now burned herself, that alone sustained her. From the morning of the day he died, Tuesday, till Wednesday evening, she ate *pāns* or betel leaves, but nothing else : and from Wednesday evening she ceased eating them. She drank no water from Tuesday. She went into the fire with the same cloth about her that she had worn in the bed of the river ; but it was made wet, from a persuasion, that even the shadow of any impure thing falling upon her when going to the pile contaminates the woman, unless counteracted by the sheet moistened in the holy stream. I must do the family the justice to say, that they all exerted themselves to dissuade the widow from her purpose ; and had she lived, she would assuredly have been cherished and honoured as the first female member of the whole house. There is no people in the world among whom parents are more loved, honoured, and obeyed than among the Hindus ; and the grandmother is always more honoured than the mother. No queen upon her throne could ever have been approached with more reverence by her subjects than was this old lady by all the members of her family as she sat upon a naked rock in the bed of the river, with only a red rag upon her head, and a single white sheet over her shoulders ! Soon after the battle of Trafalgar I heard a young lady exclaim, 'I could really wish to have had a brother killed in that action.' There is

no doubt that a family in which a *satī* takes place feels a good deal exalted in its own esteem and that of the community by the sacrifice.

Rājput.

80. Rājputs number 17,000 or about 3 per cent. of the population and own about 200 villages. A large number of septs are represented in Jubbulpore and several of them are of comparatively pure blood and intermarry with the Rājputs of the United Provinces and Rājputāna. The chief septs found in the District are Raghuvansī, Bais, Bāgri, Parihār, Gaur, Jaiswāra and Chauhāns. There are also some families of Karchulias, the remnant of the ancient Karchulis who long reigned at Tewar. They are identical with the Haihayas who according to a legend are descended from a snake (*Ahi*) and a mare (*haya*). The Parihārs belong to the 4 clans who were born from the fire in which expiatory rites were performed to regenerate the Kshattriyas after their impieties had drawn on them the vengeance of Parasurāma and the caste had been slaughtered by him on 21 occasions. There is a fairly large number of Parihārs, which is probably due to the fact that they once held a part of the District. They came from Uchahrā which borders on this District. Their rule was short-lived as they were expelled by the Chandellas and finally the Gonds. The Bais originally came from Baiswāra in the United Provinces and the Jaiswāra from a place named Jais in the same Province. The Bāgris derive their name from Bāgar, a tract of land in Mālwā, where they have a bad reputation for criminal propensities. The Gaurs also take their name from the country of that name, the western part of which is believed to have included the Jubbulpore District. The Chauhāns belong to one of the fire-born clans like the Parihārs. The Raghuvansīs claim descent from Raghu, an ancestor of the great Rāma who killed the demon king of Ceylon, but they have now developed into a separate subcaste and hold a low place, though the true Raghuvansīs still hold their former status. The Rājputs observe Brahmanical rules and regulations and abstain from widow-marriage. Belonging as they do to the military class they are universally respected and there is therefore a strong tendency for lower castes to call themselves 'Thākurs' or lords, a term formerly used for Rājputs alone.

Bania.

81. Baniās number about 17,000 persons or 2½ per cent. of the population and own over 400 villages, many of which, however, belong to the family of Rājā Seth Gokuldās. The principal subdivisions are the Parwārs, who are Jains and Agarwāls, and Gahois, who are Hindus. There is also a fair sprinkling of Asāthis, Kasarwānis, Kasaundhīs and Umres. Among the more recent immigrants are the Mārwāri Baniās, to which caste the family of Rājā Gokuldās belongs. The Parwārs as a rule are very rich and among modern temples theirs are perhaps the most beautiful and costly. There are fair specimens of these in Jubbulpore and Murwāra, where a few years ago were performed the costly *rath* ceremonies, which besides religious merit bring hereditary titles of Singhai or Seth to the performers. The leading feature in the show is a huge wooden elephant car (*rath*) in which the donor and his family are drawn along in triumph round a temporary pavilion in which the Jain gods are placed. Large entertainments are given to the caste-fellows and thousands of Parwārs flock to them. They are generally served with sweetmeats. The ceremonies cost from twenty to fifty thousand rupees. The titles given are hereditary. Parwārs came from Bundelkhand, and so also the Gahois, but why they were so named is not clear. The current proverbs abound with chaff at the expense of the Gahois. *Gahoi apne bāp kā na hoi*, 'A Gahoi is not true even to his father'. The Gahois have some peculiar rules in marriages, which were apparently introduced to accommodate both the rich and the poor. In the principal ceremonies a gift to the bridegroom should not exceed 101 Nāgpuri rupees. Of course the rich people augment this in other ways, but the established rule is strictly observed. The Asāthis are said to be the descendants of an Ahīr who became a Baniā. Agarwāls derive their name from the village Agroha in the United Provinces from which they have immigrated, but some say that they take their title from dealing in the aromatic wood of the *agar* (*Aquilaria agallocha*). They have two well-known sections known as Bisa and Dasā, the former being regarded as pure blooded and the latter of mixed origin. The Kasarwāni and Kasaundhī Baniās seem to derive their names from *kānsa* or bell metal. It

appears that their original occupation was to sell *kānsa* pots and there are still many members of these subcastes in whose shops nothing in the shape of a brass vessel would ever be found. The *gurus* of the Kabīrpanthi sect intermarry with the Kasaundhi Baniās. The Umre Baniās grow *āl* or Indian madder for dyeing and are sometimes called Alias. Other castes refuse to grow this plant because when the roots are steeped in cowdung little worms appear and when they are subsequently washed in water, these are killed and this is considered a sin. Baniās are chiefly traders and moneylenders but some have now acquired villages and taken to agriculture. They are as a rule thrifty and rich. Rājā Seth Gokuldās was perhaps the richest man of the caste not only in the District but in the whole Province.

Kāyasth.

82. Kāyasths are more numerous in this District than elsewhere though their number is not very large, there being about 5000 of them constituting about 1 per cent. of the District population. They however own more than 100 villages, the principal landholder being Beohār Raghubīr Singh of Jubbulpore. Kāyasths are also known as Lālās. They are an intelligent class and held important posts under native rulers. A minister of the famous Gond queen Durgāvati was a Kāyasth and gave his name to the Adhārtāl tank near Jubbulpore. A large number of patwāris and kānungos belong to this caste. The Kāyasths trace their descent from Chitragupta, the recorder of the dead, the personage corresponding to Rhadamanthus in Hindu mythology.

Lodhī.

83. Lodhis number 41,000 or 6 per cent. of the population and hold about 120 villages. They are chiefly found in the Pātan and Bilahri parganas. Their local subcastes are Mahdele, Singrore, Mahālodhī, Jarhā and Chhaparhā. The Mahdeles pretend to be Thākurs and their customs have been assimilated with those of Rājputs. They are generally fair-looking. They keep their women in *purdah*. They seem to derive their name from *menhdī* which plays a very important part in a Musalmān marriage and is one of the adornments of a married woman amongst Hindus. The Singrore like their namesake among Kurmis are immigrants

from Singrore near Allahābād. The Mahālodhis or great Lodhis are of low status like Mahā Brāhmans or great Brāhmans who officiate at deaths which is regarded as a very low profession. The Lodhis are excellent cultivators but of a very turbulent disposition and ever ready to join in any rising. Of all the subdivisions the Mahdeles are most high-spirited and brave. They are very extravagant at marriages and spend a large amount of money not so much on fireworks or illuminations as on feasts, in which a large quantity of food is simply wasted, because they allow a quantity to be served which cannot be consumed and must therefore go to the sweeper. They have a taste for riding and shooting and eat flesh like Rājputs. They may eat wild pigs but not fowls. They do not take liquor. They have a fair status in society, being regarded as a little higher than the Kurmis, whom they resemble in most respects except in temper.

Kurmi.

84. The Kurmis number 35,000 persons constituting 5 per cent. of the population and hold about 230 villages. Their local subcastes are Usrete, Chandnāhe, Sanaurhia, Gahoi and Singrore. The Usretes are also called Havelias, because they are found principally in the wheat growing tracts known as Haveli. The Usretes do not eat meat. The Chandnāhes say that they came from Chandanghāt near Ajodhyā, but the probability is that they emigrated from the village Chandnohā in Bundelkhand. In some of their families it is the custom to kill a pig under the palanquin of a newly married bride. The Singrores derive their name from Singrore, a great Trignometrical Station near Allahābād. Singrore is said to have been a very large place in former times and has given its name to subdivisions in other castes also. The Kurmi is an excellent cultivator. He is thrifty and hard working, and gets a lot of work done by his wives in the field. It is this which induces him to marry a number of women and there is an instance on record of a blind Kurmi possessing no less than 9 wives. A Kurmi woman is very strong and industrious. Her interest in the welfare of the crop is expressed by the saying 'If only one shower fall in the asterism of Swāti the Kurmi woman wears rings of gold.' Kurmis raise all the crops

except the garden crops. They also do not grow hemp with the exception of one subcaste which goes by the name of Santorā. On this account the latter is looked down upon by others.

Kāchhi.

85. Kāchhis number 26,000 or about 4 per cent. of the population but as elsewhere there are very few Kāchhi proprietors. Only 5 villages are held by them in this District. The Kāchhis are said to derive their name from *kachhār*, the low rich alluvial land which they usually cultivate, but the reverse appears to be the case. It is probably the soil which derives its name from the caste which cultivates it. Kāchhis have several subcastes, but the most important ones found in the District are Hardia and Kachhwāha. The former are so named because they grow *hardī* or turmeric, and the Kachhwāhas say that they are descended from the Kachhwāha Rājputs or take their name from their totem, a *kachh* or tortoise. Kāchhis are noted for the excellence of the garden crops they raise. They chiefly grow *bhatās* (egg plants), *bhāji* (vegetables), chillies, turmeric, tobacco, yams, garlic, onions and a few other condiments. Kāchhis eat flesh and drink liquor, but enjoy a fair status in society. A Brāhmaṇ will take water from their hands.

Ahīr.

86. Ahirs number 32,000 persons forming about 4½ per cent. of the population and own about 35 villages. They are really cowherds but a large number work as farm-servants and field labourers. The chief subcastes found locally are the Bharotias, Jijhotias, Gwālbansi, Kaorās or Kamarias. The Gwālbansi are usually cattle breeders. Their name is derived from *gopāl* or protector of cows. The Jijhotias derive their name from Jajhauti, the old name of Bundelkhand, whence they emigrated. They do not drink liquor and on that account consider themselves superior to other subcastes. The Bharotias have come from near Mathurā. The Kaorās say that they are descended from the Kauravas of the Mahābhārat, but they have nothing to substantiate their claim. The Dauwās are another subdivision, who are really illegitimate, as they are the offspring of Bundelā fathers by Ahir women, who were employed as wet nurses in Bundelā families. This is however not regarded as a disgrace. At the

Diwāli festival the Ahīrs dress themselves fantastically and go about dancing to the houses of the people whose cattle they graze and who give them presents. The Ahīrs are reckoned very stupid and consequently very superstitious. There is a proverb which says 'let the Ahīr read as many books as he pleases but there would always be one or the other devil after him.'

Gond.

87. Gonds number 79,000 persons and constitute $11\frac{1}{2}$ per cent. of the District population. They are the most numerous tribe in the District, and originally held a very large number of villages, but now only about 400 are in their possession. The Gonds were once dominant in this District, and had their capital at Garhā. The ruling caste called themselves Rāj-Gonds, and adopted many Hindu manners and customs and thus obtained a higher status than the rest of the tribe. They even succeeded in making connections with Rājput families; for instance Rāni Durgāvati, wife of Dalpat Shāh, belonged to the Chandel family of Mahobā. The other Gonds are known as Dhur or Dhurwā, the dust Gonds, that is the plebs. In some parts of the District they are known as Rāwanbansi, that is, belonging to the family of Rāwan, the demon king of Ceylon, whom Rāma killed. They have however no story to connect them with Ceylon and the epithet merely impli s contempt. The true Rāj-Gond wears the sacred thread and considers himself insulted if he is compared in status with ordinary Gonds. He abstains rom eating polluted animals, and performs his marriages and other ceremonies like Hindus, employing Brāhmans for the purpose. The other Gonds generally employ a tribal priest called Pardhān or Pathāri. These Pardhāns now form a di tinct subtribe, and, unlike the Hindu priests, have a lower status than those of whom they are the priests. The most primitive Gonds are known as Bhois and speak the Gondi language called Pārsi. They eat beef and are therefore much despised. The Gonds worship Būrha Deo, who is supposed to live outside the village. Females are not admitted to his worship. Elsewhere the Gonds have many peculiar customs such as marriage by capture, but in Jubbulpore these have been mostly abandoned owing to their long contact with the Hindus. Gonds as a rule are very bad cultivators, and their agriculture is confined

to the raising of inferior wet crops. They are nevertheless very hard working and do excellently as farm-servants. They are honest and truthful, but very ignorant. They are addicted to drinking, and in this way many of the landholders have lost their villages and become indigent. A wealthy Gond is as a rule very extravagant, but there are some families in this District who appear to be exceptions to this rule.

Kol.

88. Kols number 46,000 or about 7 per cent. of the District population, and are more concentrated in this District than anywhere else in the Province. They are usually labourers especially on roads and earthwork and a large number of them are employed in the Katnī lime quarries. They also serve as field labourers and farm-servants and become bond servants of their masters. They are sometimes confounded with Bharias, and it is difficult for an outsider to distinguish between them. Both are of Kolarian stock, both have wandered away from their parental abode, both have forgotten their original tongue, both employ themselves in the same occupations, both are poor and both are stupid. The well-known subdivisions of Kol are Rautia, Rautel, Thakuria, Kagwaria, Rekwār and Garhwaria. The Rautia and Rautel subdivisions practise hypergamy, the former taking girls from the latter but not *vice versa*. Thakurias are said to be descended from an alliance between a Thākur or Rājput and a Kol woman. The Kagwarias seem to derive their name from Kagwār or an offering to the deceased ancestors in the month of Kunwār. The Rekwār and Garhwarias are territorial names, the former referring to a place in the United Provinces and the latter to Garhā near Jubbulpore. The Kols of Jubbulpore having associated long with the Hindus have given up some of the practices which their brethren elsewhere follow; for instance they no longer eat monkeys or beef. Kols are great worshippers of Devī, and when they move with their families one may almost recognise them from the iron tridents, the emblems of that goddess, which they are very careful to carry with them wherever they go. Twice a year in the months of Kunwār and Chait they sow *jawāra* or barley in pots and take it out on the 9th day of the month to be consigned to a river or tank. At that time the afflatus of Devī descends on

some of her worshippers who jump about like mad men. This is called *Bhao charhnā* and to a person so affected a trident or *bāna* as it is called is given. He pierces his cheek with it and lets it remain there for hours together without showing any signs of pain. When the trident is taken out the hole quickly fills up.

Bharia.

89. Bharias number 22,000 or 3 per cent. of the population. Like Kols their number here is much larger than elsewhere. The proper name of the tribe is Bharia, but they are often called Bhumia, because many of them hold the office of Bhumia or priest of the village gods and of the lower castes and the Bharias prefer the designation of Bhumia as being the more respectable. There seems little doubt that Bharia is a contemptuous form of Bhar, a tribe found in the United Provinces, but it has become much mixed up with other local tribes. Members of all castes except the very lowest may become Bharias. In this tribe marriages are adult, and the proposal comes from a boy's father. The marriage is performed at the bride's village, and when the bridegroom's party goes there the village watchman takes a stick and wields it in menace against them but is appeased by a small present. The pair go round the marriage post 6 times at the bride's house, reserving one round to be performed at the bridegroom's house. After the wedding, the *miduā*, a sort of burlesque dance, is held. The girl's mother gets the dress of the boy's father and puts it on, together with a false beard and moustaches, and dances holding a wooden ladle in one hand and a packet of ashes in the other. Every time she approaches the bridegroom's father on her rounds she spills some of the ashes over him and occasionally gives him a crack on the head with her ladle, these actions being accompanied by bursts of laughter from the party and frenzied playing by the musicians. The Bharias are usually farm-servants and field labourers and their services in these capacities are much in request. They are hardy and industrious and so simple that it is an easy matter for their masters to involve them in perpetual debt and thus to keep them bound to service from generation to generation. They have no understanding of accounts and the saying 'Pay for the marriage of a Bharia and he is your bond-slave for ever' suffi-

ciently explains the methods adopted by their employers and creditors. The Bharias are well-known thieves, and it is a saying among them that the dark spots on the moon are caused by a banyan tree, which God planted with the object of diminishing her light and giving thieves a chance to ply their trade.

Minor castes.

90. There are 30,000 Dhīmars in this District constituting 4½ per cent. of the population. In no other District except Chānda and Bhandāra are they so strong numerically. Nevertheless only one Dhimar is known to own a village in this District. Dhimars are fishermen, boatmen and domestic servants. They are usually employed by well-to-do families for bringing water, cleaning pots and other miscellaneous work. A Dhimar eats pigs and drinks liquor and yet a Brāhman would take water from his hands. 'God made his hands clean is the dictum which mitigates his otherwise defiling behaviour. Dahaits and Khangārs are village watchmen Three-fourths of the Dahaits in this Province are found in the Jubbulpore District. According to one story these two castes are descended from a common ancestor, which is very probable. The Dahaits probably got their name from *dehāt* meaning rural tracts where they went to live. They are considered of low status and admit outsiders into their caste. Bhāts are bards who go about begging from door to door reciting *kabitts* usually in praise of the person whom they beg from. Among them may be found many impromptu versifiers. They are very troublesome at the time of marriages or other happy occasions. Formerly, if not satisfied with the presents made to them, they would make a cloth doll representing the party who did not pay them, and go on abusing and beating it with shoes wherever they went, but now they are afraid of being prosecuted for defamation and do not much resort to the device which was so effective in olden times. Joshis appease the evil planet Saturn by accepting gifts from those who come under its influence and often cheat the people in various ways, by making them believe that they can work miracles. Khatris, traders ; Halwais, sweetmeat makers; Bharbhūnjas, grain parchers ; Darjīs, tailors; Gadarias, shepherds; Kacherās and Manihārs, glass bangle makers and sellers; Lakherās, lac bangle makers ; Nais, barbers ; Mallāhs, boatmen ; Pārdhis,

hunters; Khatīk, butchers; and Pāsis, swine breeders, are among other castes whose number is much larger in this District as compared with others. There are also some small castes which are peculiar to this District and very rarely found elsewhere in the Province. These are the Parkās who are apparently an off-shoot from the Pankā weaver caste but they have forgotten this connection and now aspire to link themselves with Rājputs. They are chiefly agricultural labourers. Mūrhas are another caste deriving their name from the *mūda* or field embankment for making which they are usually employed. The Rajbhars are the Hinduised Bhars or Bharias corresponding to Rāj-Gonds but they now say that they are descended from Bharat brother of Rāma, king of Ajodhyā. They are fairly good cultivators.

Impure castes.

91. The most numerous among the impure castes are the Chamārs numbering 36,000 or about 5½ per cent. of the population. They are leather workers and make native shoes, but owing to changes of fashion a good deal of their work especially in urban areas has gone out of their hands. A large number now depend on cultivation, many of them serving as farm-servants and field labourers. They are very strong but somewhat lazy. Mochis and Jingars are offshoots of Chamārs but they have risen in status and claim Rājput origin. Mochis are usually book-binders and Jingars saddle makers. Mehrās and Koris are weavers. They weave very coarse cloth known as *khādi* which is still used by the poorest peasantry. Koris are regarded as very stupid and there are many stories about them. The Kumhārs are potters who rear pigs and use asses for carrying bricks and hence they are looked down upon. In Saugor where they use bullocks they have a better status. Dhobis (washermen) and Mehtars (sweepers) are other impure castes whose number is comparatively large in this District.

Criminal classes.

92. Mr. Brooke-Meares writes of the criminal classes of the District as follows:—The criminal castes, resident in the Jubbulpore District, are Bharias, Pathāris or the Gond-Bhāts, and Ghamandis, a class of Jogis. The Bharias are to be found in Garhā, Panāgar, Bargī, Shahpurā, Pātan, Majholi, Sihorā, Majhgawān, Umaria, Barelā and Sleemanābād circles. They

are inveterate criminals, dacoity, house-breaking, cattle-theft, and theft of forest produce being all crimes to which they are addicted, and about 50 per cent of them have been convicted of some such crimes. The Pathāris are only to be found in the Kundam and Bargī circles in the jungly parts of the country where Gonds are to be found. They are addicted to house-breaking, theft, and cattle-thefts. They are the Gond Bhāts and beg from Gonds at the time of marriages and funerals of the latter; otherwise their ordinary livelihood is cultivation and field labour. There are only some 25 families of Ghamandis in the District; they are to be found in the Sleemanābād, Majhgawān, Umaria and Kundam circles in small numbers. They are professional beggars, and only reside in temporary huts in the rains; during the rest of the year they wander about chiefly in the Chhattisgarh Division and in the Damoh, Mandlā and Seonī Districts. They are addicted to petty thefts and to thefts of ponies and buffaloes (the animals they use for their transport). These are the criminal classes proper of the District but there is a collection of the following real criminal tribes settled in different Muhallās of Jubbulpore city:—Badaks about 31 families, Multāni or Musalmān Kanjars about 45 families, Hindu Kanjars about 50 families, Berias about 10 families, Pāsis about 50 families, Doms about 25 families and Māngs about 20 families. The Multāni and Hindu Kanjars and the Berias are the descendants of gangs deported as Thags from the Saugor District some 80 years ago. The Multāni Kanjars have mostly settled down to various trades and honest livelihood; the women find a livelihood by sewing and repairing quilts, etc., but a few of the men are still addicted to house-breaking and theft. The Hindu Kanjars or Deccani Kanjars whose speech is Gujarāti are principally nowadays addicted to house-breaking; they used to be inveterate and daring dacoits. There are a good many ex-convicts among those in Jubbulpore; their women folk take employment as punkhā-wālis, and it used to be notorious that where they were so employed their employer's bungalow was soon broken into after they left. The Berias mostly make a livelihood by the prostitution of their women folk, but are born thieves and burglars. They and the Deccani Kanjars are prone to kidnapping of children, especially of girls whom they train up

to prostitution, but in Jubbulpore they are too much under the eyes of the police to be able to practise their nefarious trade. The small colony of Badaks in Jubbulpore city has been settled here for several generations, and are interrelated with the criminal Badaks of Bhopāl, whence they originally came. Their hereditary criminal instincts will apparently never die out. They are inveterate burglars, and a large proportion of them are ex-convicts. Some of them occasionally slip away in the guise of Bairāgis and Sādhus to exploit other Districts in the Province, and do not commit much crime in this District. The Pāsis are a notoriously criminal lot; they are expert house-breakers and thieves, but there is hardly any kind of crime at which they will not try their hand. A strange and filthy custom (the reason for which is obscure) in the house-breaking committed by these gentry is that one or more of the burglars stool at the place where entry into the house was effected, before leaving the scene. The ostensible livelihood of these people is cutting and selling grass, and thatching houses, in the course of which they often learn the geography of a house with a view to burgling it. The Doms call themselves Basori Bābās; their ostensible occupation is making baskets, mats, etc.,and they wander in other Districts of the Central Provinces plying their trade, begging and no doubt stealing when they can. They originally came and settled here from the Rewah State. The Māngs have as profession music-playing, and the women brush-making.

Social Life and Customs.

An ordinary village.

93. The ordinary village in the Jubbulpore District differs slightly, if at all, in the more important details, from the typical village of the other portions of the Central Provinces. The population of such a village would, in ordinary cases, be about 300, and the number of houses 50 or 60. The inhabitants of a village of this size would be nearly all cultivators and labourers, with a small percentage of beggars, and the usual quantum of *badmāshes*. The mālguzār, who is sometimes resident and sometimes not, is most frequently a Brāhman; sometimes too a Gond Thākur (or Rāj-Gond). Sometimes the village belongs to a banker or Baniā in the

city and is managed by a resident agent. Again the mālguzār may be some old Thākur who lives in another part of the *dehāt* as his fathers did before him; and though he generally only keeps up one large house in one village, is yet less of an absentee landlord than the city financier. In most villages however there is a proprietary body consisting of several *pattīdārs*, more or less related to one another, very often at enmity among themselves. The feud breaks out on the selection of a new lambardār or mukaddam and on other great occasions in the village. Generally the disputes have their root in a difference of opinion as to the allotment of shares in the profits of the village and other *dastūris*.

Next to the proprietary body come the tenants, the strength of the village. These are mostly Brāhmans, Lodhis, Kurmīs, Gonds, Kāchhis, Telis and a few other low castes. Below the tenants come the labourers, principally Gonds and Kols, and besides these Bharias, Chamārs, and Mehrās. These receive 3 or 4 rupees worth of grain a month from their employers. Besides the grain they have the produce of their farmyard stock, pigs, hens and goats; and the Gonds, Kols, Chamārs, Kumhārs and sweepers will supplement this by the addition of the flesh of an occasional dead bullock or buffalo.

The above classes depend on the actual practice of agriculture for their living. There remain the village servants. They are remunerated by a grain contribution varying in amount and fixed by long-standing custom. In return for this they serve any member of the village on demand without extra charge. The ordinary tale of village servants is as follows :—

The Dhobi, or washerman.
The Barhai, or carpenter.
The Lohār, or blacksmith.
The Nai, or barber.
The Dhīmar, the village water-carrier.
The Chamār, the tanner, cobbler, and leather-dealer.
The Bhumia, whose special duty is to keep off cattle-disease and protect the crops from hail and locusts, etc
The Ahīr, or general herdsman of the village flocks.

Unlike the growing custom of other Districts the villagers of Jubbulpore still keep to the ancient grain payments, as a means of remunerating the village servants. The Chamārs, in addition, have a right to the carcase of every animal that dies in the village, usually with a provision that the owner may claim it if he likes. But the owners are usually only too glad to get some one to remove the unclean thing. The Dhīmars are generally expert fishermen, and are very often able to supply the wandering 'Sāhib' with a welcome addition to his camp fare in the shape of a fine tank fish.

The kotwār or village-policeman is half a Government official, and receives a regular cash payment fixed by Government for the current settlement. He is usually a Dahait, a Pankā or a Mehrā.

The ordinary Jubbulpore village is picturesque in its surroundings. From the distance it generally presents a beehive-like cluster of roofs on a slight eminence, covered with tiles beaten by the weather into a soft red-brown colour. Near it will be the tank, often with great mango, mahuā and pīpal trees about it. Often there is a background of wooded hills, sometimes forming Government jungle, but more often mālguzāri. Often too there is the mango tope, in which the Government officials on tour pitch their camps. Besides these surroundings one sees standing out above the more lowly roofs the white massive walls of the mālguzār's dwelling if he be a wealthy man, sometimes taking the form of a small fort; and there are usually a few small temples crowned with the usual cupola with a small spire or point on top. There are almost always *chabūtras*, and sometimes temples of Mahādeo in the village, near some well or tank where the people bathe. Here, after bathing, they pour libations of water on the images, offer rice, flowers or leaves of the *bel* tree and repeat religious *mantras*. Offerings are made on auspicious days in the year: and often take the form of the fulfilment of a vow made in consideration of escape from some calamity.

Outside the village is sure to be a *chabūtra* of Hardol and Guraiyā; and often a *marhia* of sundry nine 'Devis' such as Kālka, Sārda, Mahāmai, Marhī, &c.; and on the border of the village there is almost always a *chabūtra* of Khermai in the shade of a *nīm* or pīpal tree. There is also nearly

always a statue or temple somewhere of Hanumānji (or Mahābīr).

The village water-supply will be derived from a tank, and wells, and often a nullah. Sometimes there is no tank but this is unusual. One well will be set apart for the low castes, who also bathe and wash their clothes in a separate part of the tank or nullah. The houses vary in size and comfort. Those of the better class, the proprietors, &c., will be round the mālguzār's house or fort, with a verandah and an *angan* or courtyard ; out-houses are often attached. For reception purposes, there is, in these houses, a separate room and a *chabūtra* in front. On the latter the people sit out and sleep ; and often village *panchāyats* are held on such *chabūtras*. The labourers have little one-roomed cottages where their whole families live together.

The low castes such as Gonds, Kols, and Chamārs have their separate *muhallās* in the village. These have special names, *e.g* , Kolwanpurā, Chamāran Tolā, Bharyān Tolā.

All the villagers are bound together by the tie of 'Gaon Bhāyap'; and all join together in celebrating the village festivals. Such are : Dasahra, Holi, Diwāli, Nāgpanchami and Rāmnavmi. They gather on these occasions at the house of a mālguzār or lambardār and perform the appropriate ceremonies. They then go home. They lay aside all ill-feeling on these days, and during Shrāwan and Naorātra festivals exchange *khajlaiyān* or *jawāre*, young shoots of wheat or barley as symbols of amity. There is no distinction of caste in giving and taking the *khajlaiyān* ; but lower caste people in offering to those of a higher caste, and young people offering to their elders, are supposed to make an obeisance or prostrate themselves. There is no distinction at Holi either, in throwing dust or red paint, among the castes. The villagers are mostly simple people. Year in and year out there is very little crime indeed, in proportion to the numbers of the population ; and on the whole they live a quiet agricultural existence, without much pleasure, but also without much pain. They know next to nothing of the outside world as a rule—often even of the villages quite close, for they are no travellers. The only glimpse of the outside world that affects them is that which they get on the very occasional visits of one or other of the touring

Government officials or when they go to bathe in the holy Nerbudda on some great festival day. But for this they are more than content to live their own life in their own way and by themselves.

Village names.

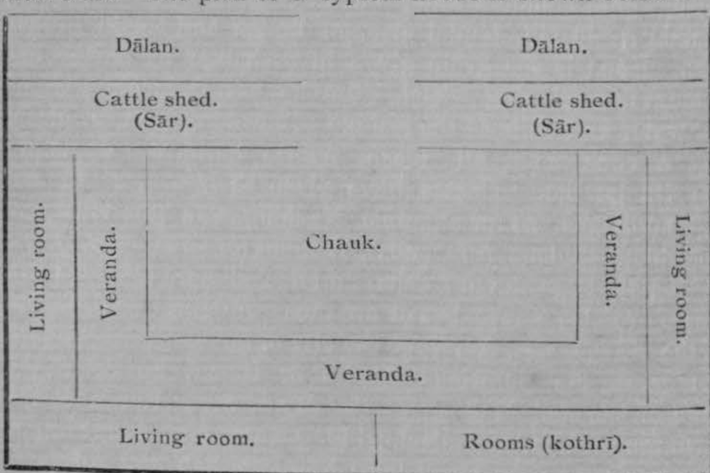
94. Villages like human beings have masculine and feminine names and in this District the latter predominate, *e.g.*, Bilahrī, Luhāri, Kūmbhi, Khirahnī, Simaria, Deorī, Umaria, &c. Some have corresponding masculine names such as Semrā, Simaria ; Deorā, Deorī ; Tinsā, Tinsī ; Belā, Belī ; Bijorā, Bijorī and Budhrā, Budhrī. Most of the villages derive their names from plants and trees, especial favourites being the *pīpal* or *pīpar*, *bar* or banyan, *am* (mango) *jāmun*, *umar*, *imlī* (tamarind) and *bel* trees. There are more than 50 villages in this District bearing the name Piparia and a fairly large number of Jamunias, Umarias and Imlias are also found. Amī, Amkuhī, Amahtā, Amākol, Amākhoh, Amānāla and Amādongarī all derive their names from *am* mango trees, and Bilhā, Bilpurā, Bilgawān, Biltikurī, Belkherā, Belkherī, Bilkhirwā, Bilpathār, Beltarā and Belsarā from *bel* (*Aigle marmelos*) ; Barkherā, Barodā, Barkachhār, Barghāt and Bargawān owe their names to the banyan tree. There are a number of Semarās or Semarias, Saliwāras, Mahagawāns, Chargawāns and Harduās, the trees giving rise to these names being the *semar*, *sāl*, *mahuā*, *chār* and *hardū*. Animals and birds have contributed names such as Bagheli from *bāgh* tiger, Bainswāhi from *bhains* buffalo, Rīchhai from *rīchh* bear, Kukrī fowl and Chilhiā kite. Various natural objects have caused many a place to be named as Dongariā from *dongar* a hill or *jhiriā* meaning a spring, while the position of certain villages has given them names like Majhgawān or Majholī, both meaning the middle village and implying a later settlement than the villages between which they are situated. Those of recent settlement are known as Naigain or Naigawān, that is, new village. Temporary cattle sheds on the grazing grounds have sometimes attracted settlements in their vicinity and have thus given names to the various Chhaparās scattered all over the District. The numerous Khamhariās obtained their names from the fact that they were at some time or other made *khamhār* or *khām*, that is, home farm by the chiefs or jāgirdārs who owned them. The exist-

ence of temples in certain villages has caused no less than 40 villages to be called Deorī or Deorā, the first or the feminine form being most common. There are also villages which derive their names from a married couple, their ornaments or household furniture. Thus we have a Dulhākherā, bridegroom's village and a Dulhankherā or bride's village, and Bichhia and Bahuntā, the former of which is a name of a toe and the latter of an elbow ornament. There is also the village Dolī which means a palanquin in which a married couple are usually carried and Jhāmpi, a basket in which their clothes are placed. Rasuiyā is a cook room, Karahiā a frying pan, Kūndo a water basin, Kathotiā a wooden bowl, Kuthlā grain bin, Kudai cleaned kodon and Kanki broken rice. Kenā is the grain given in exchange by barter and Rehntā is a spinning wheel, Khatoli a cot, Ghinochi a tripod for water and Chihutā the residue of cowdung used for cleaning a cook-room, all these names curiously depicting the village life. Castes have given their names to not a few villages, as for example Kachhigawān (the village of Kāchhis), Gudāno (of Gonds), Bamhnī (of Brāhmans), Jugiā (of Jogis), Tilgawān (of Telis) and Barhaikherā (of Barhais). There are also names based on those of deities or founders of the village, *e.g.*, Amarpur the city of gods, Bijerāghogarh the fort of the victorious Rāgho or Rāma, Sūrajpurā the town of the sun, Maheshpur the city of Siva, Karanbel the town founded by the Kalachuri king Karnadeva, Singrāmpur that founded by the Gond king Sangrāmshāh and Adhārtāl where Adhār Kāyasth a minister of Rāni Durgāvati dug a tank. Some of the peculiar names are Singaldīp (Ceylon Island), Antarbed (the Doab between the Ganges and Jamuna), Kanoja (from the historic Kanauj of the United Provinces) and Vilāyat (chiefly used for Afghānistān and now extended to include Europe). Lastly are found some onomatopœic names, for instance the village Bujbujā which takes its name from *bujbuj* or sound of the marshy land near it. The usual words meaning 'village' are :—*gaon* or *gawān* as in Bargawān, *pur* or *purā* as in Rāmpur, *kherā* or *kherī* as in Belkherā, and *wāra* a corruption of *vātak* or *pātak* as in Kanhwāra. These are usually found at the end of village names, those ending in *wāra* being chiefly met with in the Murwāra tahsil, for instance Gulwāra, Kailwāra, Nanhwāra,

Barwāra, Bharwāra, &c. Other terminations are *tolā* a hamlet as in Amātolā, *kol* a hole as in Amākol, *khoh* a cave as in Amākhoh, *tarā* or *sarā* a tank as in Biltarā. The Persian termination *abād* is met with only in Sleemanābād a name which was given to the village Kuhkā to commemorate Major-General Sir William Sleeman of the Thugee Department, who is still well remembered in the District. Jubbulpore has hardly any villages with Musalmān names.

Houses.

95. The house of a mālguzār or good tenant stands in a courtyard or *angan* 45 to 60 feet square and surrounded by a brick or mud wall. The plan of a typical house is shown below :—



The *dālan* or hall is for the reception of visitors. One of the living rooms is set apart for storing grain. Those who keep their women secluded have a door at the back of the courtyard for their use. Cooking is done in one of the rooms, and there are no chimneys, the smoke escaping through the tiles. They bathe either in the *chauk* or central courtyard, or go out and bathe in a tank or river or at a well. Hot water is not usually used for bathing except by invalids. The family usually sleep inside the house in the winter, and outside in the hot weather. A poor mālguzār or tenant only has two rooms with a veranda in front, one of which is used by the family, while cattle are kept in the other. The poorest tenants have only one room in which both men and cattle reside. A mālguzār's house as shown

above costs Rs. 200 to Rs. 250 when the walls are of mud, and Rs. 400 to Rs. 500 when they are of bricks. The house of an average tenant costs Rs. 30 or Rs. 40. Nearly all houses are tiled, thatch being avoided owing to the risk of fire. Poor tenants do repairs to their houses themselves, sometimes even making the tiles. Such a house lasts for 15 or 20 years, being repaired annually. Houses in towns are usually more costly than in villages and also better built. A house should not face south as this is unlucky. Some families have a prejudice against a second storey, some will not have stone houses, and others will not have their court-yards paved. The well-to-do consult a Brāhman as to the selection of a site for a new house. The foundation stone is laid with some ceremony, it being lucky that it should be laid by a man who has been faithful to his wife. Small pieces of new cloth of various colours are tied on to the eaves while the walls are being built, and marks of charcoal are made on the door frame to avert the evil eye, which might cause the walls to crack or the stone to split. New houses are occupied on auspicious days, a ceremony of purification being first performed accompanied by the feeding of Brāhmans.

A cultivator's house and furniture.

96. Single-storied, with mud walls, and a roof covered with ill-made and ill-baked tiles, the cultivator's house stands in its little compound if he be a man of means, or end to end with another house of the same kind if he be poor. The interior is dark, for light is admitted only by the low door, and the smoke-stained ceiling contributes to the gloom. The floor is of beaten earth, well plastered with cowdung, the plastering being repeated weekly. In one corner of the room we may see a large box in which are kept the garments of the family ; with it may be a tin tube containing the title-deeds of the owner, and the certificates which have been given to him and his forefathers by Government officials. Carefully arranged in their places are the brass cooking-pots, water-pots and plates well polished with mud and water by the careful housewife. Poor tenants frequently only have one or two brass plates and cups and an iron girdle, while all the rest of their vessels are of earthenware. Near these lies the fire place, a horse shoe-like mound of mud, with a high rim on which to rest the pot.

In a niche in the wall lies a bundle of papers, carefully tied up in red-coloured coarse cloth. These the master of the house has brought back from the tahsīl town with him; they are receipts for rents paid to the mālguzār, and with them lies the horoscope of the son of the house. At the back of the house is a small compound, and in this the string cots of the family are lying exposed to the sun; for insects are frequently found in them, and sleep is disturbed, if the cots be not thoroughly sun-heated at least once a week. In the compound, too, is a small raised altar-like edifice in which grows a sprig of the sacred *tulsī* (*Ocimum sanctum*). In the back veranda lie several earthenware pots full of water from the village well, and in a niche in the wall is coiled the rope which is fastened to the neck of the pot when it is lowered into the well. Resting against the compound walls, and also it may be against the walls of the house, are cakes of cowdung on which the finger-prints of the women who made them are clearly visible. The jungle is near at hand so there are but a few sticks lying piled up in a corner. These are useful when hot fire is needed, but for nursing the spark throughout the day cowdung cakes are used. Chairs and tables there are none, nor would the good people know how to use them if they had them. In one niche, however, there is evidence of civilisation; a bottle bought at the weekly market for 2 annas, contains some of the earth-oil which comes from 'Vilāyet,' and which is burnt in little tin lamps on high days and holidays. For ordinary use there is an earthenware saucer half filled with til or linseed oil, into which dips a strand of cotton thread whose other end rests on the margin of the saucer, and when lit gives a feeble light and volumes of smoke, less noisesome however than that given off when the kerosine lamplet is lighted. The latter is now gradually displacing the old *diyā* as kerosine oil is cheaper than vegetable oil. Tenants usually do not have cots but sleep on the ground, spreading kodon-straw on it for warmth. They have no bedding except a *gudrī* or mattress made of old rags and clothes sewn together. In winter they put it over them, and they sleep on it in summer. Mālguzārs have a *rasai* or quilt and a *doria* or thick cloth like those used for covering carts, with a cot to sleep on. A mālguzār's cooking and eating vessels

may be worth Rs. 30 or Rs. 40, though well-to-do persons who entertain largely on festive occasions keep a much more extensive supply.

97. *Chapātis* of wheat, pulse, vegetables, *ghī* and milk are the staple food of the better classes and *chapātis* of juār and kodon and kutkī boiled in water of the poorer ones. The well-to-do classes eat twice, those who cultivate with their own hands twice or three times, and the Gonds sometimes four times a day. The Gond does not eat salt with his meals, but takes a few chillies and a little salt after them. His vegetables consist of the young leaves of the pīpal, the *rusallā* (*Cordia myxa*), the *keolār* (*Bauhinia racemosa*), the little *chakorā* weed (*Cassia tora*) and the tender shoots of gram, which he is allowed by custom to pluck from his master's field for nothing. Mushrooms and the soft young shoots of bamboos also figure in his diet. Country beans and tomatoes are other vegetables often grown in gardens. The oil of *jagnī* is mixed with vegetables for cooking. Among the delicacies consumed at festivals and offered to guests are wheat cakes fried in *ghī*, curds and gram-flour boiled with chillies, salt, turmeric and coriander and rice. All men smoke, home-grown tobacco being principally consumed. Opium is given to children until they are three or four years old to keep them quiet. Betel-leaf is only obtainable in the large villages, and the ordinary cultivator eats areca nuts alone.

Food.

98. Men usually wear white clothes, and coats with buttons are being adopted in place of the old *angarkhā* and *bandi* tied with strings over the breast. Landowners wear cotton trousers for full dress. Most cultivators have a handkerchief of coloured country cloth, which they carry over the shoulder or round the waist, and in which they tie up money, tobacco and any other small articles they require with them. During winter they have coats of *banāt* or rough serge. A small piece of red cloth, called *angochhā*, serves as the common head-dress. Women wear a *lahengā* or skirt drawn up between the legs behind, with a shoulder-cloth and an *angia* or breast-cloth, tied with strings at the back, and patched with pieces of coloured cloth to make it look attractive. Others have the long cloth going round the waist and over the shoulders known as *dhutia* or

Clothes.

sāri. These are often black or bluish-black, and less frequently red or blue. Gond women formerly wore white clothes, but have recently adopted coloured ones in imitation of their Hindu sisters. Shoes are of two kinds called *nokdār* and *mundā*, the former having pointed toes. The better classes in towns wear shoes imported from Calcutta and Delhi. Women have *tariās* or sandals open round the instep. Only the highest castes bathe every day and the others once or twice a week. Hot water is often used for bathing in the winter. The Gond is said to bathe three times a year at the Polā, Diwāli and Hareli festivals, and if he washes on other occasions his friends say that he will fall ill as he has become a *pan-dubbī* or water-bird. Indian soap is now to be purchased at the important bazars, but in the interior the people use wood-ashes for cleaning themselves. The custom of wearing beards was formerly prevalent among old men, but it is now going out even among Muhammadans. The men wear their hair in towns, but in the country the cultivators often shave the whole head except the scalp-lock. Rājputs formerly wore long locks of hair hanging on each side of the face like the love-locks of the Cavaliers.

Daily life of the cultivator.

99. The day of the village is made up of 8 *pahars* or watches, four of the day counting from dawn and four of the night. Early in the morning the cultivator proceeds to his field; his wife milks the cows or buffaloes and drives them to the cattle-stand outside the village, where she makes them over to the village grazier or *baredi.* She then sweeps the floor, keeping the door open as she does so, for it is common belief that Lakshmī, the goddess of wealth, visits every house in the morning, and enters into those which she finds clean and open, but returns if the door is shut. She then goes and fetches water from the village well, usually in *gāghars* or large earthen pots. After this she grinds the juār or wheat for the day's food, if she has not already done so before dawn, it being a common custom of women to get up at 3 or 4 a.m. and grind the corn for the day. She removes the dung and urine from the cattle-stalls, and if it is the dry season, makes cakes for fuel by mixing the dung with chopped grass and a little water, unless she is in

a position to employ a female servant or *gobarwâli* to do this for her. She next cleans the *chaukā* or cooking-place, sweeping the hearth clear of ashes, and plastering it with fresh cowdung, cleans the brass eating vessels by rubbing them with earth or ashes, and churns the buttermilk, after which she bathes and cooks the mid-day meal. By this time her husband returns from the fields and bathes and eats his meal. The little children will eat from the same dish, but the wife will wait to eat until her husband has finished. After the meal the man will smoke his *chilam* or clay pipe-bowl, filled with home-grown and very strong tobacco, drawing the smoke through his hands; after a short rest he returns to work. In the cold weather, when the days are comparatively short, the food of a Lodhī and Kurmī cultivator is frequently taken to him in the fields. The cultivator cannot usually afford betel-vine, but he keeps a piece of areca-nut in his *thailia* or little bag, and eats a little after meals, or gives it to a guest. After her meal the wife again cleans the hearth and vessels, picks the earth and pebbles out of the grain for the next day's food, waters the calves or plough-cattle which may be left at home and gives them straw. She then joins her husband at his work, or in a slack season will perhaps sleep after her labours or visit her friends to discuss the news of the village, for example the latest marriage, the appearance and character of the bridal pair, and births, deaths and other events occurring in the village. At evening she goes home to prepare the meal for her husband on his return from the fields, first taking back her cattle from the grazier and milking them, unless she has a son or daughter to do this for her. After the meal the husband may go out to the mālguzār's house tying a little tobacco in the corner of his headcloth, or in the cold weather may sit with the villagers round the *alāo*, a hole dug in the ground and filled with a fire of cowdung cakes, and here the conversation may continue up to mid-night. Sometimes he will attend a reading of the Rāmâyana or join in a visit to the local temples. But in the cold weather the cultivator has not much time to stay at home in the evenings, but eats his meal and then taking his *lāthi* or stick and a burning cowdung cake, goes off to watch the crops, accompanied by his dog.

With the cowdung cake he makes a small fire to warm himself by, and also to scare away the animals which damage the crops. The villager does not usually possess matches, but keeps in his little bag a piece of iron, a flint stone and some cotton waste, which he can set alight when required by striking the iron against the flint. In the house cowdung cakes are kept buried in ashes and the *diyā* or earthen lamp is lighted by strips of hemp-stalk which burn well. Unless there is a Dhobi in the village the people wash their own clothes. They are shaved once a fortnight or once a month by the barber.

Social and religious customs.

100. The villagers show great respect to their elders and to officials. A woman will not walk on ground which has been spread with cowdung by her mother-in-law or other elder relation if she can avoid it, and if unavoidable she will make obeisance before putting her foot on it. Women visiting each other's houses observe the same formality. If one meets an elder member of her family out-of-doors, she will stop talking or laughing, take off her shoes, and stand aside to let him pass. Husbands and wives do not talk to each other in the presence of the elders of their family. Men similarly give the salutation of *Rām, Rām*, *Pālāgi*, or *Namaskār* to their elders on meeting them. They do not smoke before their elders. There is a considerable amount of fellow-feeling in the village. On the occasion of a death one representative from every house in the village will as a rule attend, and will bring a piece of wood to help in making the funeral pyre. When a marriage occurs each household will send a woman to help in grinding the grain for the feast, and cooking and eating vessels will readily be lent to the family which is celebrating the marriage. At sowing and harvest time the cultivators help each other so that each man may get his work done in reasonable time. Those who receive assistance give their helpers food in the evening. The village proprietor has one day's work from each plough with cattle and ploughman. The villagers will subscribe for the marriage of a poor girl in the village if it cannot be performed otherwise, and especially for the daughter of a poor Brāhman. Sometimes a foreign Brāhman wanders through the District collecting subscriptions for the marriage of his

daughter in her own country. The villager is very superstitious. If any one falls ill in the house, he vows to have a recitation of one of the sacred books,especially the Satya Nārāyan, or a collection of poems in praise of Nārāyan or Vishnu, or to feed virgins, or offer *sīdhās* or a present of wheat flour, salt, *ghī*, vegetables and spices to Brāhmans, or to make an offering of the water of the Nerbudda to Mahādeo's temple at Bāndakpur in Damoh on the day of Shivrātri. In the last case some member of the family must make a pilgrimage to the temple, or if no one can go, an outsider must be hired to do it. If he has amassed some money he will undertake a pilgrimage to the great temple at Mathurā or Brindāban or to Jagannāth in Orissa or to Allahābād. If a person falls ill on a Tuesday, it is thought that he is sure to die; similarly to sneeze when a sick man lies down on his bed, or is drinking any medicine is most unlucky. The *Panchak* or the period of five days at the end of each month is very unlucky. During this period nobody occupies a new house or begins any important business. If a man dies during these five days it is thought that he will cause the death of four other members of the family, and to avert the misfortune four small human figures are made of gram-flour and carried out and burnt with the corpse. The upper stone of the hand-mill is also thrown away on the outskirts of the village. If a man dies on a festival day it is lucky for him, as he will go straight to heaven, but it is unlucky for his family, who must cease the observance of that festival. A corpse must not be burnt during the night, or it will be born blind in the next birth. It is also very unlucky for a child to be born during the *Mūl* asterism or *Nakshatra* (one of the 27 *Nakshatras* or astronomical periods of 15 days). Such a birth may cause the death of one of the child's grand parents or in the worst case that of its father, and elaborate rites of purification are gone through to avert the omen, while for the rest of the period the husband and wife practise various rules of abstinence.

Marriage ceremonies.

101. The marriages of boys are not performed sometimes until they are fifteen years old, but twelve is considered to be the proper age for boys and nine for girls. If the parents are badly off, the marriage is usually delayed, but the bride-

groom is arranged for three or four years before the ceremony takes place. The *sagai* or betrothal is the preliminary to a marriage, and the barber and *pandit* or Brāhman priest must be employed in it. The barber acts as a go-between or marriage agent and describes the character and person of the bride and bridegroom to the other's family, while the *pandit* casts their horoscopes. The barber, however, is not now relied on, as he may take a present from one of the parties to arrange the marriage, in spite of some physical defect or other drawback which he conceals. A member of the family therefore usually accompanies the barber. The lower castes have now begun to adopt the full ceremonial prescribed for orthodox Hindus. All over the District when the women of a bridal party go out to perform ceremonies they abuse any respectable man whom they meet or whose house they pass. Similarly when the marriage guests are feasting the women sing obscene songs from inside the house, and sometimes drench the guests with water, or throw handfuls of gram-flour and betel nut and sugar cakes at them. Among the lower castes they smear the faces of the guests with turmeric or make impressions with their fingers on their backs after dipping them in turmeric and water. After the procession has gone to the bride's house the women of the bridegroom's party who stay behind sometimes dress up a young girl as a boy and go round to the houses of their neighbours, dancing to the accompaniment of a drum and singing obscene songs. The bride always goes to her husband's house for a short time after the ceremony, in order to give his family an opportunity of seeing her, as the women of the bridegroom's family do not accompany the marriage party. If she is under age, the *gaunā* or going away ceremony is performed in the 1st, 3rd or 5th year after marriage, the bridegroom with a small party going to the bride's house to fetch her after the performance of a sacrifice. But in this District in order to save expenditure the going away ceremony is sometimes performed immediately after the marriage and is then known as *lot patā* and consists of changing the wooden seats of the pair which is regarded as equivalent to the *gaunā* ceremony.

Widow-marriage and kept women.

102. Widow-marriage is not permitted by Brāhmans, Rājputs, Kāyasths, Baniās and Mahdele Lodhis, but all other castes allow it. The marriage takes place in the dark fortnight, and only men and other widows take part in it. The widow is brought to her future husband's house, where he puts glass bangles on her wrists, and presents her with new clothes and she becomes his wife. The custom of keeping women has, however, until lately been common in all castes. The Dauwā Ahīrs are a special subcaste formed of the offspring of Bundelā fathers from Ahīr women. There are usually several of these persons attached to the houses of leading Bundelā families with whom they exercise a great influence. Brāhmans will take water from their hands. Similarly the Benaikayās or Lahurī Sen are an offshoot of Parwār Baniās, being the children of widows who are kept by the men of the caste. They often have their own temples as they are not allowed to enter the regular temples, or in any case to touch the god.

Ceremonies at birth.

103. Elaborate ceremonies are customary at the birth of a child, and religion and superstition are mingled with hygienic and medical treatment of the mother and child. The rejoicings for the birth are held on the 12th day, the near relatives being invited and given a feast. In the evening the women of the village come and sing songs suitable to the occasion to the accompaniment of drums. The relatives of the family bring presents of small silver bangles, caps, coats, handkerchiefs and toys of brass or wood for the child. These are accepted by the parents and cash payments are made generally amounting to double the value of the things received. Other relatives have guns with blank cartridges fired on the walls of the house to show their joy.

Customs at death.

104. When a man is near his end gifts to Brāhmans are made by him or his son on his behalf. These, if he is a rich man, consist of five cows with their calves marked on the forehead and hoofs with turmeric and with garlands of flowers round their necks. When it is evident that the dying man has but a few minutes to live, he is laid on a woollen blanket or a cotton sheet, which is spread on the ground, so that

his passing may be easy. In his mouth are placed a piece of gold, some *tulsī* or basil plant, and the *panchāmrita*, or milk, curds, *ghī*, sugar and honey. The dying man must lie with his head to the north and his feet to the south. So valuable as a means of securing a pure death is the presence of a piece of gold in the mouth, that some castes have small pieces of gold inserted into a couple of their upper teeth, in order that wherever and whenever they may die, the gold may be present to purify them. The dying man keeps on repeating, 'Rām Rām, Sitārām.'

Funeral rites.

105. As soon as a death has occurred the corpse if that of a female is bathed and clothed, if that of a male the corpse is clothed but bathing and shaving are deferred till the cremation ground is reached. A bier is constructed of bamboos or of the wood of the teak or *sāj* (*Terminalia tomentosa*), two side pieces being made, on which are bound with hemp or string five or seven cross pieces according to the height of the deceased. On the bier is laid straw, over which is spread a piece of newly purchased white cotton cloth of fine texture; the corpse is laid on this and covered with a piece of the same cloth. The covered corpse is tied securely on the bier, the hands being crossed on the breast and the thumbs and great toes tied together. The funeral procession then starts for the burning *ghāt*, the barber walking in front, and carrying in his hand an earthen pot suspended from a wooden triangle of bamboo, to which three cords of *palās* fibre are attached to hold it by. The pot contains smouldering cowdung cakes, obtained from outside the house, and destined to furnish the fire with which the pyre will be kindled. After him come the four corpse-bearers, and after them the relatives and friends of the deceased. At some convenient spot, usually under a pipal tree, the procession halts, the bier is laid on the ground, and two pice coins and five small pebbles are left.

Cremation.

106. The procession then proceeds to the cremation ground, and when this is reached, the corpse is taken from the bier and placed on the pyre. The cloth which covered it and that on which it lay are given to a sweeper who is always present to receive this perquisite. To the corpse's mouth, eyes, ears, nostrils and throat is applied a mixture of barley,

ghi, sesamum seeds and powdered sandalwood. Logs are then piled on the corpse and the pyre fired by the son. The fire is first applied to the head end of the pyre, and then resin is strewn over all, and it is fired in several places. When the body is half consumed the son takes up a piece of wood and with it strikes the skull seven times to break it and give exit to the soul. The son then takes up on his right shoulder an earthen pot full of water, in the bottom of which is a small hole. He walks round the pyre three times in the direction of the sun's course and stands facing to the south, and dashes the pot to the ground crying out in his grief 'Oh! my father.' This is the only expression of sorrow which is permitted during the ceremony. While this is going on among the higher castes *mantras* or sacred verses are recited by the officiating Brāhman. When the corpse is nearly consumed all the assembly throw the *panch-lakariyā* (pieces of wood or sprigs of *tulsi*) on to the pyre making obeisance to the deceased and saying '*Swarg ko jao*' or, 'Ascend to heaven.' After the ceremony is concluded, the procession repairs to the nearest river or tank, and after bathing come to the house of the deceased where they find *nīm* leaves (*Melia indica*) set ready, and chew them. They condole with the bereaved ones, extolling the virtues of the deceased, and then return to their homes. When they are gone the women of the family bathe, and on the tenth day the bangles of the widow are broken, the vermilion on the parting of her hair and the glass ornament (*tiklī*) on her forehead are removed, her glass bangles are broken, and she is clad in white clothing of coarse texture to show that henceforth she is only a widow.

Mourning.

107. On the third day after the cremation, or if that be a Sunday or a Wednesday or a day noted in the almanac as inauspicious, then on the fourth day the son, who has been living apart from the others, proceeds to the cremation ground, where after bathing he sprinkles the ashes of the pyre with milk. The lower castes sprinkle water or wheat. The ashes and bones of the deceased are then collected and placed in a silken bag, the lower castes depositing them in an earthen pot. The bag and its contents are either taken straight to the Ganges or Nerbudda or buried in a convenient spot and

taken there within ten days, or even after that if the journey has to be postponed. If this occurs no marriage ceremony can be performed in the family until the ashes are disposed of. The son or brother of the deceased takes them to the river and returns with Ganges water in a tightly closed brass or copper vessel. The vessel is worshipped and a small feast is given, after which the water is used for some religious ceremony. In most castes on the first day, the son cooks for himself a mess of pulse and rice, of which he eats some and gives the remainder to a dog, a cow or a young unmarried girl.

Provision for the soul.

108. On the 3rd day the *pindas* or sacrificial cakes are offered with the recitation of appropriate verses on the banks of a tank or river, and this goes on till the tenth day. On the evening of the third day, the son goes accompanied by a Brāhman and a barber, and carrying a key to avert evil to a pīpal (*Ficus religiosa*) tree, on whose branches he hangs two earthen pots by strings of *palās*-fibre. One pot is full of water which trickles out through a hole in the bottom, while the other contains an earthen lamp. On each succeeding night the son replenishes the contents of these pots which are intended to refresh the spirit of the deceased and to light it on its way to the lower world.

Return of the soul.

109. Some castes observe the following custom on the evening of the 10th day. The ashes of the cooking place are carefully sifted, and the fine powder thus obtained is spread on a brass tray, which is left overnight on the spot where the deceased breathed his last, or near the cooking-place. In the morning the layer of ashes is inspected and if what appears to be a hand or foot-print is seen, it is held that the spirit of the deceased has visited the house. Some castes look for hand-prints, some for foot-prints, and some for both, and Nais look for the print of a cow's hoof, which when seen is held to prove that the deceased in consideration of his singular merits has been re-born a cow. On the 10th day the males of the family bathe at the river or tank and undergo ceremonial shaving, the entire head from the left ear across the crown to the right ear being shaved. This ceremony is obligatory on a man whose father, mother, uncle or elder brother has died, but the death of a wife,

sister, son, daughter or younger brother does not entail its performance. In the evening a feast is held for the family and their menial servants. A portion of the viands is set part in leaf-plates on the spot where the deceased breathed his last, and after a while this portion is given to a cow. Among the lower castes the feast is held on the third day, and the deceased's portion is removed to a distance from the house and left on the road leading to the cremation ground.

Gifts for the dead.

110. The period of mourning is 3 days in low castes, and also among Gonds, and 10 in the case of the higher castes. On the 11th day the ceremony of purification takes place when the whole house is whitewashed, all clothes washed and the earthen pots are thrown away and replaced by new ones. On this day if the family can afford it a *dān* or gift is made to a Brāhman consisting of a new cot and bedding with a cloth, an umbrella to shield the spirit from the sun's rays, a copper vessel full of water to quench its thirst, a brass lamp to guide it on its journey, and a blanket, shoes and such articles as the deceased used. Such gifts are accepted only by Katyā and Mahā-Brāhmans who are looked down on by other Brāhmans. On the 13th day a feast is given, all the relations and friends who took part in the cremation ceremony being invited, and each being given a brass *lotā*, or if this cannot be managed a few copper coins. Among Brāhmans only 13 persons are invited.

Burial.

111. The bodies of children who have died before cutting their teeth and sometimes of those under five years old are buried. The bodies of persons who have died of small-pox or leprosy are always buried. If a person has died by hanging or drowning or from the bite of a snake his body is burnt without any rites, but in order that his soul may be saved the *hom* sacrifice is performed subsequently to cremation.

Leading Families.

General notice.

112. Families of historical importance belong principally to the Gond tribe and some of them still possess a considerable number of villages, whose acquisition dates back to the time of the

Gond Rājās of Garhā-Mandlā. Another interesting survival is the Brāhman family representative of the Saugor Rājās, who were the means of extinguishing the rule of the Gond dynasty. There are also a number of Lodhi families owning large estates which were acquired by their ancestors for military service to the State. But the family, though not of historical importance, which by reason of its wealth overshadows that of all others in the District is that of the late Rājā Gokuldās. This family has held the premier place among the Jubbulpore bankers and merchants for the past century or more.

Brāhman families.

113. The best known Brāhman family is the Marāthā Brāhman family of Jubbulpore known as the Saugorwāle Rājā whose present representative is Pandit Raghunāth Rao. He is the grandson of Rānī Rukmā Bai Sāhib of Saugor whose territory was ceded to the British Government in the year 1818. After the death of Rānī Rukmā Bai, her son Rājā Balwant Rao Bāba Sāhib was granted a political pension of Rs. 10,000 a year and was allowed to take up his residence in Jubbulpore. His son Pandit Raghunāth Rao draws a reduced pension of Rs. 5,000 a year. In addition he owns 5 whole villages and shares in two others. He is exempted from the Arms Act, holds the first seat in the District Darbār and is Chairman of the District Council. Although the family has long since lost its former glory it is still held in great esteem in the District.

Rao Bahādur Bihārilāl, a Bhārgava Brāhman, owns a large estate of 43 villages, besides having an extensive money-lending business. The family originally belonged to the Gurgaon District of the Punjab and the present representative's father settled in Jubbulpore in 1820. He was appointed 'Khazānchi' of 3 District treasuries (including Jubbulpore) and was succeeded by his son Bihārilāl, who was relieved of this work by the establishment of a branch of the Bank of Bengal at Jubbulpore in 1866. Bihārilāl has always taken a great interest in all public work of the city, especially in education, and has been associated with the District Council and the local municipality for many years. In 1893 Bihārilāl was instrumental in establishing the Bhārgava Commercial Bank at Jubbulpore.

The other Brāhman families of note are the Hindustāni Brāhmans of Sihorā, Khitolā, Piparia, Bijerāghogarh and Barhī.

The Shukul family is the leading Sarjūpāri Brāhman family of the Sihorā tahsīl. The founder of the family was Hitkar Shukul, a resident of the Gorakhpur District of the United Provinces, who settled at Piparia as a moneylender about two centuries ago. He married the only daughter of the Sūbah of Umaria and their son inherited the latter's property. The family grew in wealth and importance and two of its members were acting as Sūbah and Tahsildār respectively under the Bhonslas at the time of the advent of the British in 1818. The family is now divided into two branches, one branch residing at Sihorā and Khitolā, the other at Pondī and Piparia. Pandit Vishnu Dutt of Sihorā is the recognized head of the family. His estate consists of 16 villages and during his minority these were managed by the Court of Wards. The annual income is about Rs. 20,000. Pandit Vishnu Dutt is a Graduate of the Allahābād University and was awarded a gold medal for his proficiency in Sanskrit in 1896. He is an Honorary Magistrate exercising 1st class powers. He is also a member of the Local Board and District Council and Vice President of the Sihorā municipality. Pandit Narāyan Prasād of Khitolā owns 12 villages. The Piparia branch of the family represented by Rewā Prasād and Harihar Dutt has fallen upon evil times. The former's estate consisting of 12 villages has passed completely into the hands of his creditor Rao Bahādur Bihārilāl Khazānchi. Rewā Prasād is a member of the Local Board and District Council but is very badly off. Harihar Dutt owns 5 villages but has debts to the large amount of Rs. 15,000. Other members of this family are also to be found at Chhaparwāh in Murwāra tahsīl, Kunro Piparia, Garchāpa, Barailu, Gaurhā, Ghāt Khamaria and Silondi in Sihorā tahsīl and Kash and Padaria in Jubbulpore tahsīl.

The Pāndes of Bijerāghogarh are also a well-known and respected Brāhman family. The founder of the family Sheodin Rām was brought from Maihar by Prayāg Dās Rājā of Bijerāghogarh at the beginning of the 19th century as Rāj-Purohit (family priest). The present head Rai Bahādur Hanumān Prasād owns 17½ villages which he manages efficiently

The title of Rai Bahādur was granted to him in 1898 in recognition of services rendered by him in the famine of 1896-97. He is a member of the District Council, a Darbāri and is exempt from the Arms Act. The Pāndes of Barhi are descendants of the Diwān of the Nagod State. Sheo Govind Pānde, who assisted the British Government in the Mutiny of 1857 and was granted 8 villages in *muāfi* for his life-time. Jāgeshwar Prasād, his grandson, and the present representative of the family is very heavily indebted. The Pāndes of Khalwāra also came to Bijerāghogarh with Rājā Prayāg Dās. They were the State bankers and were given one village in *ubāri* which is still retained as such, as the family was of some service to the Government in 1857. Sarju Prasād, the present representative, still carries on the business of money-lending and is in prosperous circumstances. He is a Darbāri and exempt from the Arms Act.

Kshattriya families.

114. These families are not prosperous, but are historically important. They all belong to that part of the Murwāra tahsil which lies near the Rewah State. The most important is the family of the old Rājās of Bijerāghogarh represented by Thākur Brij Mohan Singh. His great-grandfather Prayāg Dās was the brother of the Rājā of Maihar, and founded a separate Rāj at Bijerāghogarh in the early part of the 19th century. After his death, the management of the State was undertaken by the British Government in 1848 on account of the minority of his son Sarjū Prasād. During the Mutiny of 1857 Sarjū Prasād was led away by evil advice, and joined the insurgents. He procured the murder of the Tahsīldār of Bijerāghogarh but was finally apprehended and his State confiscated. Sarjū Prasād's son, Thākur Jagmohan Singh, was allowed a pension of Rs. 100 per month and was also given a post of Tahsīldār. He won some distinction as a poet and has left many poetical pieces and a Hindi novel. He died in 1899. A pension of Rs. 50 a month is continued to his son, who is a graduate of the Allahābād University. The family has no landed property and is now in a very reduced condition. The Thākurs of Ghunaur, Bhainswāhi and Singori are of the same stock as the Mahārājā of Rewah and possess small estates. Thākur Hira Singh of Singori gets a political pension of Rs. 833-4

per year which was granted to him in 1835, in lieu of the villages which were confiscated from him by the chief of Bijerāghogarh whose estate finally passed to the British Government on account of his disloyalty. The family is now in very straitened circumstances. The family of Bhainswāhi represented by Amarjit Singh is also historically important and is said to have rendered some help to the Government in 1857. The village of Bhainswāhi is held on a quit-rent and two other villages in ordinary tenure. The family of Ghunaur represented by Hira Singh is in possession of nine villages, but is slightly indebted. It still enjoys the confidence of the Mahārājā of Rewah and the uncle of Hira Singh is the Chief Treasurer of the Rewah Rāj.

Lodhi families.

115. Of Lodhi families, those of Belkherā and Salaiyā are the most important. The Belkherā family is said originally to have come from the Punjab and to have acquired a large estate from the Mandlā Rājās in return for help given in repelling an invader. Thākur Chet Singh, the grandfather of the present representative Shobhā Singh, was of great help to the Government in 1857 and was rewarded by the present of a sword and 3 villages with Rs. 2,000 cash. The estate was badly managed by Pulandar Singh brother of Shobhā Singh and became heavily indebted. It is now under the indirect management of the Court of Wards. Shobhā Singh is a Darbāri and is exempt from the Arms Act.

Gond families.

116. The Gond families are historically the most important in the District. Most of them are in prosperous circumstances. The chief families are (1) the Rājā of Imlai represented by Rājā Vishwanāth Singh, (2) Rājā Bhopāl Singh of Bhandrā, (3) Thākur Jugrāj Singh of Khandwāra, (4) Thākur Gaibhar Singh of Kundā-Mardāngarh, (5) Thākur Ahbaran Singh of Ruhania and (6) Thākur Hanumān Singh of Barwāra.

Rājā Vishwanāth Singh is the proprietor of 124 villages of which only 9 are held in mālguzāri right, the others being held on a quit-rent. The estate was granted to an ancestor of the present holder by Rājā Nizām Shāh of Mandlā, and was continued by the Marāthās. The family

was always noted for the ready help it gave to the ruling chiefs. It was of service to the British Government in the year 1857 and as a reward was allowed the continuance of the *muāfi* villages and also of the title of Rājā which was granted to it by the Marāthās when this tract of country was invaded by Nawāb Amīrkhān. The Rājā is called Kammalposh because it is said that when he goes to the Darbār he must do so wearing a blanket over his shoulders. The estate was under the management of the Court of Wards during the minority of Rājā Vishwanāth Singh. The family is now prosperous and free from debt. Ganesh Singh the founder of the family of Bhandrā represented by Rājā Bhopāl Singh migrated to Mandlā from Bhopāl in the time of Rājā Nizām Shāh who gave him 36 villages in *muāfi* in the Jubbulpore District. These villages are now held on a quit-rent, with the exception of one which was sold for arrears of land revenue. The estate has been under the management of the Court of Wards since 1905 and is indebted to the extent of Rs. 1,00,000. The title of Rājā was granted to the family by Rājā Nizām Shāh of Mandlā.

The founder of the family of Thākur Jugrāj Singh of Khandwāra came to Mandlā from the Bilāspur District in the time of Rājā Nizām Shāh who bestowed on him 24 villages in the Sihorā tahsīl. His son Bahādur Singh did some service during the Mutiny and was granted another 13 villages belonging to Rājā Mahpāl Singh of Bhatgaon who had given trouble to the Government. He also received a shield worth Rs. 100 and a sword worth Rs. 50. Bahādur Singh's grandson is now the proprietor. The estate is indebted to the extent of Rs. 9000 only. The Thākurs of Khandwāra spent a large amount of money on relief measures in the famine of 1899-1900. Jugrāj Singh is a Darbāri and is also exempt under the Arms Act. The family of Kūnda-Mardāngarh represented by Rao Gaibhar Singh was given 33 villages by the Mandlā Rājās. These were held in *muāfi* up to the time of the first settlement when the villages were continued on *ubāri* tenure. The estate is very heavily indebted and most of its villages are now already either in the hands of creditors or passing away to them. The family has only some *sir* land left for maintenance.

The Thākurs of Ruhania and Barwāra are of the same family. It is not known when this family was divided. Both the families belonged to the house of the Rājā of Mandlā and were allowed *ubāri* and *muāfi* villages as their share (*Bhayāchār*). The Ruhania branch as represented by Thākur Ahbaran Singh possesses 33 villages in all; only 3 of them are held as mālguzāri, the others being held on a quit-rent. This family is prosperous. The head of the Barwāra branch is Thākur Hanumān Singh. He has 59 villages of which only one is *ubāri*. The Thākur is an old man of 69 years. He has a business capacity rarely found among Gonds, and has extended his estate very largely. He has a reputation for wealth and has constructed a tank at Barwāra.

Other families.

117. Among Vaishyas, the family of the late Rājā Gokuldās, which is of the Maheshri Baniā caste, dwarfs all others. This family originally migrated from Jesalmer in Rājputāna and the founder settled at Jubbulpore prior to the cession of the Saugor and Nerbudda territories to the British Crown in 1817. Villages were owned by it in the Jubbulpore District even at that remote period. Its representatives have always been noted for their loyalty to the British Government. In the darkest period of the Mutiny of 1857, when others held back, Seth Khusālchand, the father of the late Rājā Gokuldās, advanced a large sum of money for the purchase of cavalry horses to Major Erskine on his simple note of hand. He also furnished supplies for a column in the field in the height of the rains of 1857, when these could not have otherwise been obtained. In addition he lent large sums of money to enable the authorities at Allahābād to find transport for the several columns advancing for the relief of Lucknow. His villagers also helped to capture and destroy bands of rebels. For these services he was rewarded with a *khillat* of shawls, a gold badge and a *parwāna* by order of the Governor General. At his death he was succeeded by his two sons the late Rājā Gokuldās and Seth Gopāldās, father of R. B. Ballabhdās, who however died shortly afterwards. Rājā Gokuldās was conspicuous for his liberal donations to various works of public utility, among these being

Rs. 30,000 for the Jubilee Town Hall at Jubbulpore, Rs. 20,000 for the Elgin Hospital, Rs 10,000 for the Technical Institute at Nāgpur, Rs. 5000 for the Countess of Dufferin Fund, of which he was made a Life Councillor, and Rs. 15,000 for the Victoria Memorial. His last act was the gift of the Darbār Hall at the Nāgpur Exhibition. For the help given to the local Municipality in the construction of its water-works, he was granted the title of Rai Bahādur and for the gift of a Town Hall to the city of Jubbulpore he was created a Rājā. To commemorate his liberality in connection with the water-works, the Municipality has sanctioned the construction of a *dharamshāla* in front of which will be placed a bust of the Rājā and the Honourable the Chief Commissioner has contributed the sum of Rs. 1000 from the Provincial Revenues towards the memorial in addition to a sum of Rs. 27,000 to be provided by the Municipal Committee.

Rājā Gokuldās died on the 11th December 1908 and was succeeded by his only son Seth Jīwandās, who by his liberal donations has early shown signs of following in the footsteps of his ancestors. The family now possess 158 villages in the Jubbulpore District, some of these being rent-free. In addition they have valuable landed property in many other Districts of the Province. The family is very influential on account of its vast banking business which is carried on by a net-work of shops scattered throughout the Province. The late Rājā's business acumen was shown not only in his money-lending business but also in his industrial undertakings, as instanced by the Pottery Works and Cotton Mills of Jubbulpore and the numerous cotton ginning and pressing factories scattered not only throughout the Central Provinces and Berār, but in the towns of Multan and Etawah in the United Provinces. The business was and is now carried on in partnership with Rai Bahādur Ballabhdās, a nephew of Rājā Gokuldās. He too takes a great interest in all public movements of the city and has been President of the Municipality for many years and also the President of the Landholders' Association. He is well known for his business sagacity.

The only Kāyasth family of note in the District is that of Beohār Raghubīr Singh of Jubbulpore. This family is a very ancient one and has been in possession of about 60 villages



Bemrose, Collo., Derby.

THE TOWN HALL, JUBBULPORE.

(some of them in the Mandlā District) for the last two centuries. The ancestors of the family were in the service of the Gond Rājās and the Bhonslas as Private Secretaries and Head Kānungos and as such acquired an intimate knowledge of the affairs of state. One of them by name Katāre Singh was given by the Gond Rājā the title of 'Beohār' (custom), that is one who is familiar with the customs and particulars of the estate. The family still possesses some very old records about territorial disputes and jāgīrs. The present representative Beohār Raghubir Singh is a young man of 27 years of age. He has already begun to take an active part in public life and is the Secretary of the Local Board and a member of the District Council. He is also an Honorary Magistrate and a Darbāri. His estate was for some time under the management of the Court of Wards, but the management was relinquished on his attaining his majority. The estate is still indebted to the extent of about Rs. 40,000.

Other minor families are those of Rai Sāhib Rikhi Rām Naik of Bilahrī and Chaudhri Bhaiya Lāl of Jubbulpore. The former, a Baniā, possesses 23 villages, which were acquired by purchase either by him or by his father. The title 'Naik' was a name locally given to his father on account of his extensive grain dealings and is still retained though the business has been dropped. Rikhi Rām is a public-spirited citizen and was granted the title of Rai Sāhib at the time of the Delhi Darbār, 1903, for the services he had rendered in the famines of 1896 and 1899-1900. He is slightly indebted. The family of Chaudhri Bhaiya Lāl, Jain Parwār by caste, has been resident of Jubbulpore for nearly a century. It is in possession of 10 villages in mālguzāri right, and also carries on a money-lending and grain business. The family has on occasions been of some assistance to the Government and has always been noted for its charitable actions. The site of the present Town Hall was presented by it and it has always been a custom of the family to set apart one village for *sadāvart*, that is, for the provision of a free meal for all comers. Bhaiya Lāl Chaudhri is a public-spirited man, is a member of the Municipal Committee and takes a special interest in the cause of education. He is a Darbāri and exempt from the Arms Act.

The Ingle family of Jubbulpore was also once an important one. The head of the family was a Marāthā who came as Sūbahdār of Jubbulpore in the time of the Bhonslas. The family has fallen on evil times, having lost almost all the *muāfi* villages it formerly possessed. The head of the family is Shankar Rao Ingle who has still connections and some *muāfi* land near Poona.

CHAPTER V.

AGRICULTURE.

SOILS.

118. Soils may be classed according to their position, their physical properties or the crops they grow. The soils occupying the largest areas of the Jubbulpore District are formed by the decomposition of fragmental quartzes and felspars. Silica, the basis of all soils, is here found mixed with very varying amounts of alumina, iron, magnesia, lime and the alkalies, their proportions being determined by the nature of the parent rock. The best and most fertile of the soils are made up of particles worn down to a very fine degree of communition and correspondingly well decomposed, these being generally described as clay soils. At the other extreme are sands consisting of large particles of nearly pure silica, and between the two various degrees of clay loams, sandy loams, &c. Roughly speaking the clays occur at the lowest, and the sands at the highest levels, this being largely caused by rain-wash removing the finest particles from elevations and depositing them in the valleys. This erosion which takes place in every field lying on a slope is prevented to a great extent by the construction of embankments. The soils in which clay predominates are remarkable for their power of retaining moisture and their continuous fertility but those composed chiefly of sand are only fertile during seasons of abundant precipitation. Good wheat producing soils of a stiff nature contain in this District from 40 to 50 per cent. of clay and rather less than 6 per cent. of organic matter. A good sandy loam contains up to 30 per cent. of clay but this proportion is greatly reduced in the case of real sand.

Soils.

119. Under the system of soil classification employed by the Marāthās soils were distinguished from each other by the crops actually grown upon them. The following was the nomenclature adopted :—

Early methods of soil classification.

(i) *Sidhi*, land producing *rabi* crops, garden produce, sugarcane, and madder.

(ii) *Banjar*, waste land.

(iii) *Mūrho*, land covered with exhausted tufts of *kāns* grass and ready for the plough again.

(iv) *Burm*, soil growing cotton.

(v) *Kodwāri*, or kodon land.

(vi) *Juāri*, or juār land.

(vii) *Dhanhai*, or rice land.

No allowance was made for any difference in the fertility of soils growing the same kind of crops, nor for the superiority of embanked to unembanked land. The first land revenue settlements under British rule were made by Mr. Malony, and his efforts were at once directed to the development of a system which would produce a more evenly distributed assessment. To this end Mr. Malony not only employed differential village rates, an innovation at that time, but he introduced into the system of classification a distinction between embanked and unembanked lands which had hitherto been wanting. The former were valued at rates one-third in excess of those employed for the latter.

The soil classification of 1827.

120. When Mr. Fraser made his settlement in 1827 he not only distinguished between soils by means of their crop capacities but also by means of their position and relative productiveness. The names of the different soil classes recognized by Mr. Fraser were as follows :—1 *mund*, 2 *kābar*, 3 *gubrā*, 4 *harkābar*, 5 *domattā* or *dudhia sahār*, 6 *tāmbar*, 7 *panduā*, 8 *pataruā*.

Mr. Fraser thus describes each variety :—

'*Mund* is of a black colour with a greyish tinge, very friable 'and contains many minute shells and pebbles. When 'ploughed it does not break in clods but spreads over a large 'space, and therefore the furrows are wider apart than in '*kābar*, the proportion being, it is said, as 2 to 3. It yields 'better crops of wheat than of gram and consequently wheat 'is always sown in it alone, till a fallow becomes necessary 'from exhaustion ; but it is not unusual a year or two before 'the fallow to till it for *alsi*. The durability of its produc-'tive qualities is represented to be less than that of *kābar*, 'but I have heard what strikes me as not unlikely that a 'shorter fallow than that required for *kābar* will renovate it. In *mund* more than one harvest a year is not expected.

'*Kābar* is a dark black and tenacious soil free from pebbles 'and forms into large clods. It answers for all *rabi* grains, 'but is particularly well adapted for gram, though the most 'common crop is a mixture of wheat and gram. It dries 'rather more quickly than *mund*, but is often cultivated for 'two harvests, or a *rabi* one in succession to rice.

'*Gubrā* is neither so black nor so binding as *kābar*, and 'has the pebbles found in *mund*. It bears finer crops of 'wheat than of gram, but the two are most frequently sown 'mixed together and the wheat raised from it is held in 'higher estimation than that of *mund*, even by the natives.

'*Harkābar* being stiffer cakes more than pure *kābar*, and 'is not, I am told, so generally free from pebbles; it dries 'faster and on high ground the crops are more precarious 'than those of *kābar*, and it rarely yields two successive ones 'in the same year.

'*Domattā* or *dudhia sahār* is described in colour by its 'latter designation, being black with a strong milky hue. 'Plots of it close to the huts of a village will bear a *rabi* crop 'after a *kharīf* one has been reaped, not so however the 'more distant, which are chiefly sown with either wheat, 'gram or rice. It is a good soil for sugarcane or gardens, 'and well tilled with a seasonable fall of rain in the month of 'Kunwār, its wheat crops are by no means deficient, but 'without the rain they admit of no comparison with a *kābar* 'or *mund* harvest.

'*Tāmbar* is of a reddish yellow or copper colour and often 'remarkable for a long retention of moisture, remaining dry 'but a small part of the year. It answers well for rice, but 'wheat though occasionally sown is apt to fail from excess 'of damp, particularly with much rain during the cold season.

'*Panduā* is yellow, good for sugarcane and rice, and 'seldom cultivated for wheat or gram.

'*Pataruā* includes all poor high lands, whether stony or 'sandy, and is invariably appropriated for a *kharīf* harvest.'

'The four soils' continued Mr. Fraser, '*mund*, *kābar*, *gubrā*, 'and *harkābar*, are supposed to be equal in value, the pecu- 'liar advantages of one balancing those of another.

'If a shade of difference exist, the last might be placed 'below the others because of its drying, if anything, more 'rapidly. They compose together the greater part of all

'*havelis* and their extensiveness is fortunate in allowing a 'higher assessment.

'*Domattia tāmbar*, or *panduā*, planted with sugarcane, pay 'an equal assessment with the better soils; their rates, 'however, vary with the crop, and when that happens to be 'wheat, in the two first the rate recommended is ⅔rds of the 'highest assumed on *bandhwās*. The last never bears wheat, 'and it, with *pataruā*, are never classed as *rabi* lands.

'*Tagar* lands, or those without bands, are divided into 'three classes, wheat or *rabi tagar* and the two kinds of '*kharīf tagar* called *motā* and *pataruā*.'

Mr. Fraser assessed the *rabi tagar* at two-thirds of the rate on *bandhwās* and the *kharīf tagar* according to the description of the standing crop.

A *sidhi tūsi*[1] was valued at Rs. 22 in the Sihorā Haveli and at Rs. 20 in the Pātan Haveli, there being some idea that the Sihorā soils were more fertile than those of Jubbulpore; but much greater differences were made in rates than before, for the above valuations applied only to *bandhwās* lands, and a *tūsi* of cotton, or of unembanked wheat land carried a valuation of Rs. 13-8. The poorer soils in the riverine areas of the Hiran and Nerbudda were assessed at Rs. 6 per *tūsi* and soils inferior to these according to the crops grown. In Gond villages, situated in the jungle tracts, a rate of Rs. 12-6 was imposed for every plough of four bullocks, Re. 0-12-0 for every axe, and Rs. 6-4 for every hundred mahuā trees.

The systems of 1835 and of the 30 years' settlement.

121. At the 20 years' settlement of 1835-36 the minute classification of Mr Fraser was discarded and Major Low, who made the settlement, reported that he had divided the land 'into the only four classes or descriptions that are practically used or named by the people themselves in fixing their rents'. The four descriptions of soil recognized by Major Low were—

(1) *Kkābar*, (2) *mund*, (3) *pataruā*, (4) *ritua*.

Writing in 1869 of the classification adopted in 1827, Mr. Russell stated Mr. Fraser's descriptions already quoted to be 'perfectly correct', and commenting on Major Low's system,

1 For the explanation of the terms *tūsi* and *sīahi tūsi* the reader is referred to the Chapter on Land Revenue.

he remarked :—'Unquestionably the three descriptions of 'kābar, gubrā-kābar and harkābar are merely three varieties of 'kābar, being found respectively in the open country, valleys 'and hilly regions; so all three varieties were classed in the 'new settlement papers under the general term of kābar or 1st 'class land which it undoubtedly is. The next description or 'mund, 2nd class soil, possesses distinctive characteristics 'from the presence of small particles of kankar and pebbles, 'which detract from its productiveness as compared with 'kābar. The other descriptions called domatta, tāmbar and 'panduā are likewise of the same family only differing in ap-'pearance in different localities. They were all accordingly 'classed under the general term of pataruā or 3rd class soil, a 'term usually employed to express soil, not possessing suffici-'ent depth before rock or kankar beds may be met with. 'Having adopted the name of pataruā for all soils not falling 'under the denomination of rabi-yielding soils, which com-'monly speaking only mean kābar and mund, which produce 'those crops unaided by artificial means, a name was required 'for the fourth and poorest description of soil, or in other 'words for mere beds of sand and kankar which are never 'embanked, as the water percolates through the bunds, in 'which nothing but the poor species of wet crops could be 'raised in a favourable season, and to this description of soil 'the name of ritua (or sandy) was given, being well under-'stood and used in most parts of the District. The classi-'fication of soils accordingly stood as under :—

'1.	*Kābar*	... *Bandhwās.*
	,, ...	... *Tagar.*
'2.	*Mund*	.. *Bandhwās.*
	,, ...	... *Tagar.*
'3.	*Pataruā*...	... *Bandhwās.*
	,, ...	... *Tagar.* ,
'4.	*Ritua*	

Writing of the Bijerāghogarh pargana Mr. Russell says :—'In Bijerāghogarh the people only acknowledge three de-'scriptions of soil, *viz.*, (1) *mair* which includes the *kābar* 'and *mund* of Jubbulpore, (2) *sigmā*, corresponding to the 'varieties included here under the term *pataruā*, and (3) '*patarī* or sandy soil. For the sake of uniformity however 'the same classification was observed in Bijerāghogarh as

'in the rest of the District, and as the system of embanking 'fields even on a superior principle to that followed in the 'District proper is much in vogue here, the subdivisions of '*bandhwās* and *tagar* were also observed, but perhaps not 'quite so minutely as they should have been, for bands here 'are of two kinds, the larger or *narbāndhs* being less 'numerous though more productive, and the ordinary or '*samīla* bands which are common and less productive.'

The present system of classification.

122. At the time when the current settlement was made the Settlement Code had just been brought into being, the present system of settlement was in its infancy, and it was not until towards the completion of settlement that a soil classification suited to all the different local conditions to be found in this District was devised. When the revision operations now in progress were undertaken this classification was revised and amplified and has been adopted in the form about to be described.

The soil classes which the system comprises are:— 1. *kābar* I, 2. *kābar* II, 3. *mund* I, 4. *mund* II, 5. *domattā*, 6. *sehrā*, 7. *pataruā*, 8. *bhatuā*, 9. *barrā*, 10. *kachhār*. The following is a description of these:—

Kābar I.—A very black and tenacious soil of very close and even texture containing no pebbles. Its splendid moisture-retaining qualities are due to the fact that being a soil of great density and its outer surface drying very quickly under a hot sun it splits up into large blocks from which subsequent evaporation takes place very slowly. These blocks though exceedingly hard and apparently dry are found when broken to contain moisture within them right up to the commencement of the hot weather. The soil consists in some localities of the more argillaceous portions of disintegrated basalts; in other localities kaolin is produced by the disintegration of the felspar of the metamorphic rocks which is washed away and re-deposited as clay. In years of light rainfall *kābar* will yield an excellent crop of rice, followed by a fine crop of wheat. But the cultivators say that a wheat crop following rice is generally one-third less in quantity than wheat sown in *kābar* which has not just yielded a rice crop. In years of ordinary or heavy rainfall the cultivator does not as a rule attempt to double

crop *kābar* and is content with the excellent wheat, or more commonly *birrā* crop, which is almost certain to result unless a wet spring induces rust in the wheat. *Kābar* is additionally valuable because in years of short rainfall it can be sown when other coarser soils, more loamy or more sandy and less retentive of moisture, cannot be. The *kābar* of Jubbulpore is not, however, so fine as the *mariār* of Hoshangābād, and corresponds in its unembanked state with the land known as *kābar* in that District. It is, however, generally embanked in Jubbulpore and probably the accumulated *rasam* or solution of decayed matter which years of the embanked state have deposited has brought the land to a high pitch of fertility and darkened its colour.[1] *Mariār* will not stand embankment and when embanked becomes water-logged. Hence there appears to be some reason for supposing that the *kābar* of this District was originally in its natural state a soil inferior to *mariār*. *Kābar* when embanked cannot be ploughed directly after rain, and from three to five days are allowed to elapse after the *bāndh* has been cut and before the operation is attempted.

Kābar II.—*Kābar* I should be either perfectly flat or embanked, for when sloping the water quickly carries away the fine particles of which the soil is composed leaving an inferior residue. *Kābar* II is not so black as *kābar* I, and it will probably be found embanked. The embankment once made stops scouring and saves the soil from further deterioration. *Kābar* II unembanked is very rarely found and land so classed should be looked on with suspicion. In characteristics *kābar* II is very like *kābar* I, but the process of disintegration has not advanced quite so far and perhaps the oxide of iron is not in such a finely divided state. Hence we get a soil coarser in texture than *kābar* I, less fertile and less retentive of moisture. The characteristic feature of fields of *kābar* is seen in the wide fissures into which the blocks of soil are divided by the action of the sun on them when wet. It is

---

[1] This problem of colour has recently been studied by Mr. Annett, Agricultural Chemist at Pusa. He has proved pretty conclusively that the black colour of soils in the Nerbudda valley is due to the presence of magnetic oxide of iron (Fe_3O_4) in a finely divided state in the soil.

usual to find little black nodules which the people call *kāla kankar* in *kābar* soil.

Mund I.—The great distinction between *kābar* and *mund* soil is that the latter contains nodules of white limestone which the people call *safed kankar.* This distinction between the soils is that which the people themselves recognize. *Mund* I should contain no other pebbles or gravel save *safed kankar*, should be black with a greyish tinge, and is a friable soil which spreads well under the plough.

Mund II.—Is lighter in colour and may contain more pebbles and limestones than *mund* I, and the distinction between it and some kinds of *domattā* is very hard to make by eye. The test is in the cropping. *Mund* II is never sown with rice. At settlement out of 137,236 acres of rice land only 307 acres fell under the *kābar* and *mund* classes and were probably wrongly classed. Both classes of *mund* are essentially *rabi* soils and grow excellent crops of wheat and linseed but they are not so suitable for gram as *kābar*, on which soil the tap roots of gram can get well down into the moist interior of the hard blocks.

Domattā.—Is, as its name implies, a soil containing both the black soils already mentioned and the yellow sandy soil called *sehrā* (frequently called *sahār*). Its character as regards cropping varies as its component portions of black and yellow soil vary. It generally grows very fine crops of rice, and when near the village site, is frequently embanked and double cropped. It is not uncommon to find *domattā* in which the proportion of black soil is so great as to prevent rice being grown upon it. Such soil generally grows wheat and is embanked and is rightly distinguished from *mund.* As might be expected from its composition, the colour of *domattā* is of great variety. It may be a milky yellow, or a milky black ; a light or dark red with a strong tinge of black is also to be found. But the admixture of two soils of different characters and colours is generally easily noticeable.

Sehrā.—Is the typical rice soil of the District and it is unusual to find *sehrā* either double-cropped or under *rabi* crops. Small embankments or field boundaries surround *sehrā* rice fields.

Pataruā.—Is described by Khān Bahādur Aulād Husain (paragraph 7 of the Settlement Report) as light blackish soil

growing inferior crops only. *Pataruā* as generally understood by the people is an all-embracing term, and includes all *halkī zamīn* or land which will not grow rice or wheat Its appearance is so various that any attempt to describe it would only partially succeed. The term *pataruā* is applied to land which is too poor to include in the *mund*, *domattā*, or *sehrā* classes. When there is any doubt or difficulty as to the exact nature of land, and it does not grow rice or wheat, the land is classed as *pataruā*.

Bhatuā.—Is the red soil, always shallow and stony, which is found on the slopes of hills and ravines. This soil can only produce oilseeds and the small millets, and the true difference between it and *pataruā* lies in the fact that whereas *pataruā* requires resting fallows of only 3 years, *bhatuā* generally lies fallow for 5 to 7 years at a time. The people say that there is no difference in the value of the crops produced by *pataruā* and *bhatuā*.

Barrā.—Is land in the classification of which there should be room for no mistake. It is hilly land so covered with stones that the wonder is that it can be cultivated at all. It appears that about every 8 years or so a profitable crop of *til* or of *kodon* can be raised from it; the value of the crop is said to be the same as that of *bhatuā*.

Kachhār.—Is the term applied to specially favoured land situated on the banks of rivers which annually overflow their banks and leave a rich alluvial deposit behind. All such land has been long ago taken up, and very high rents are paid for it. The outturn of such land is not inferior to that of *kābar* I.

The following classification is applied to the above mentioned descriptions of soils, according to the crops which they have been recorded as producing:—(I) Wheat land (*gohtarū*), (II) Rice land (*dhanhai*), (III) Garden land (*bāri*), including irrigated land growing vegetables, spices and the like, and the small and highly manured plots round the village site, (IV) Inferior land (*mutfarikāt*), incapable of producing rice or wheat and its mixtures.

Before detailing the position classes it is necessary to discuss the various kinds of embankments which are to be found in this District. The mere field boundaries, a foot or so high, which surround rice fields may be left out of the question and wheat embankments alone considered.

Land embanked for wheat in the Jubbulpore District falls under one of the following heads:—(I) *Narbāndh*, (II) *Bandhwās*, (III) *Tagar bandhia*.

Narbāndhs are to be found most commonly in the Murwāra tahsīl though land, which might be thus classed, is also found in the other two tahsīls of the District. As understood by the people, the term is used to describe land upon which the water from a large catchment area is caused to accumulate during the rains by means of one or more embankments. A single embankment across the course of a nullah or across the land over which the water would otherwise escape from a large area frequently produces a lake many acres in extent.

Narbāndh embankments are generally of very large dimensions exceeding the bank of a tank both in height and substance. The land benefited by the water in a *narbāndh* field which has been embanked on two or more sides is capable of easy definition and the whole area of the field can usually be classed with justice as *narbāndh*. In the case of a large area of land subject to a single embankment great care has to be taken to ascertain the extent and degree of the benefits secured by the *narbāndh*. This end is attained by an exact inspection and classification of *narbāndh* areas within themselves; all land which is not fully benefited by submersion is excluded from the *narbāndh* position class. That land which is really *narbāndh* is of exceptional value cannot be denied. The people say that *narbāndh* fields yielded good crops even in years of famine. During the field season of 1905-06 nine crop experiments in wheat on *narbāndh* land yielded an average outturn of 1,000 lbs. an acre, a result which the people themselves admit to be by no means unusual. Most *narbāndhs* are provided with masonry sluices of solid construction. Wheat in *narbāndh* fields is very liable to rust should the spring be wet and the monsoon have been heavy, but any disadvantages which *narbāndhs* may possess are much more than outweighed by the security which they confer upon cultivation.

The term *bandhwās* is applied to field embankments of a substantial nature, but a *bandhwās* field does not obtain its supply of water from a catchment area, and will not fill unless the rainfall be sufficient. The embankments hold up

the water, weeds are cut and thrown in to float and decay; in effect decomposed animal and vegetable matter is deposited on the field while organic acids are formed during the processes of decay most of which have a very powerful disintegrating action on the soil. The embankments of most *bandhwās* fields must be cut to let out the water.

The term *tagar bandhia* is applied to fields, the embankments of which are, as a rule, not high enough and not sufficiently substantial to necessitate their being cut to let out water. They are of little use in ensuring security of cultivation and their main advantages are that they prevent scouring, and also that they do, in years of average rainfall, hold up a certain amount of water, help to secure a moist seedbed, and render the field more productive than it would be otherwise. From such fields the water escapes by percolation. Unembanked wheat land is described as *tagar*.

For rice land the positions are :—(I) *Jhilān* or low-lying land, (II) '*samān*', level land, and (III) '*tikrā*', high-lying land from the surface of which the water speedily disappears.

Only such land as produced rice and wheat was entered as double cropped at settlement. The reason for this was that the crop obtained from land in this District which has already produced rice is poor, and it is only when the second crop is wheat that a return of substantial value is secured. Under the present system of soil classification great attention is paid to the crops which have been grown upon a field during the past ten years. The trained Inspector is guided not only by the opinion which he forms on the spot, but by the capabilities of the field as displayed by our land records. Fields which are capable of producing rice and a second crop of wheat once in every three years, or more frequently, are placed in the wheat class justified by soil and position. This device results in a suitable valuation and avoids the further complication which the addition of a *dofaslī* class entails.

Inferior land includes all land which is incapable of producing rice or wheat. The test should be the records of past years. *Mutfarikāt* land has no position class. *Bāri* or garden land is divided into two classes—irrigated and unirrigated.

The following terms of description are also used :—

(I) *Geunrā*, land receiving the drainage of the village site.

(II) *Abpāshi*, irrigated land.

(III) *Bharkīla*, sloping land of which the water drains so rapidly as to scour the land and impair its fertility.

(IV) *Ujarhā*, land damaged by wild animals.

(V) *Bahrā*, or low-lying land situated on the slopes of a nullah and growing exceptionally fine crops of wheat. Land in this position is very much prized and is usually to be found in the home farm. It is distinguished by the people from *kachhār*, and correctly so. For *kachhār* land depends for its fertility on the alluvial silt deposited on it, and on the annual over-flow of the river on the banks of which it is situated. It is therefore very much more dependent on the rainfall than *bahrā* land which lies so low that, if there be any rain at all, it is sure to bear a good crop.

STATISTICS OF CULTIVATION.

123. Statistics. The village area at settlement was 2,277,284 acres; the area in 1907-08 is 2,280,779 acres. The insignificant increase in area is due to the correction of the District boundaries and to the excision of cultivable land from reserved forest. The unoccupied area at settlement was 860,628 acres ; in 1902-03 the area was 886,858 acres ; but, as the District recovered from the effects of bad seasons, the unoccupied area decreased again until in 1906-07 (a normal year) the area was 844,384 acres. Of the occupied area of the District 41 per cent. is in the Jubbulpore tahsīl, 27 in the Sihorā and 32 in the Murwāra tahsīl. The Jubbulpore tahsīl includes the greater portion of that densely populated and cultivated alluvial plain the fertility of which contributes nearly half the rents and revenue of the District. In the Mangelā and Pātan groups, for instance, 90 and 92 per cent. respectively of the village area is occupied.

124. Progress of cultivation. The occupied area at settlement was 1,413,670 acres, and in 1906-07 it was 1,436,299 acres, representing an increase of

2 per cent. The area of new fallow at settlement was 293,711 acres. The area under crop was 1,053,899 acres. In 1906-07 these areas were 243,076 and 1,058,722 acres respectively. The old fallow area which was 66,059 acres at settlement rose to 134,499 acres in 1906-07. Most of this difference lies in the poorest lands of the jungle tracts, which require long resting fallows and very wet seasons. The following is a comparison of the areas under the important crops of the District :—

Name of Crop.	Settlement area in acres.	1906-07 area in acres.
Wheat	460,919	308,046
Rice	171,983	152,866
Kodon	165,873	213,950
Gram	79,347	173,775

The wheat boom and a succession of very good seasons were responsible at settlement for an inflated and abnormal area under wheat, the cereal being sown recklessly on soils altogether unsuited to it. The area of 1906-07 probably represents a normal area under present conditions. The decrease in the area under rice means little, for the coarsest rices, which are very extensively sown, are of the same value as kodon. In wet years the area under the coarse rices increases while the kodon area decreases. In dry years the situation is reversed. In years of short rainfall the rice plants are weak and stunted ; in wet years the kodon will not grow vigorously. Calculations which give the cultivator the benefit of every doubt show that a normal yield on the present cropping of the District must be at least equal in value to the normal yield of the seasons which preceded settlement.

CROPS.

Wheat (*Triticum sativum*).

125. Wheat has always been the staple of the District. There are now 370,000 acres under this crop. The ordinary cultivator divides the Genus *Triticum* into two classes *gehūn* and *pissī*. This rough and ready classification is remarkably accurate and agrees with the two sub-species of *Triticum sativum* into which most of the wheats of the District actually fall, *viz.* :—

I. *Triticum sativum vulgare*—including *pissī*, *mundī pissī* and *mudiyā*.

II. *Triticum sativum durum*—the Macaroni wheats which are generally considered to comprise such wheats as *kathia*, *kathī*, *jalālia* and *hānsia*.

III. *Triticum sativum compactum*—or Dwarf wheat is represented by the variety known as *dhanā gehūn* which is but sparingly grown in the more jungly tracts. It is recognised by its very short ears which are nearly awnless and its small round hard yellow grains which are shaped something like the fruit of the coriander, hence its name. It is a hardy variety but it is said to be hard to grind into flour owing partly to its extreme hardness and partly to the shape of the grain.

Taking class I first, there are several local types of bearded *pissī* in the Central Provinces. The one mostly grown in the Jubbulpore District is a white chaffed bearded variety with a very lax head and big glumes which is known as *sīkarhai pissī*. *Lāl pissī*, which only differs from the above in possessing soft pink grains, is rarely grown and is generally found only as an occasional mixture in samples of the soft white variety. A red chaffed bearded variety with a smaller yellower grain is very occasionally grown in the north-eastern parts of the District and has apparently been introduced from Chhattīsgarh where it is common. *Mundī pissī* is similar to bearded *pissī* in outward respects except that the beard is missing. Its grain, however, is considerably harder and can readily be picked out in a sample. It requires less time to bring it to maturity than other common Central Provinces wheats and hence is usually sown in heavy embanked lands which cannot be sown so early as the lighter soils. It is undoubtedly more resistant to the attacks of black rust than *sikarhai pissi*, but on the other hand it suffers more from the depredation of wild animals and birds than the latter variety; pigs are especially fond of it and cultivators declare that these animals will finish off a crop of *mundī pissī* before they touch the bearded *pissī* though they may be sown in adjoining fields. A red chaffed variety of *mundī* is occasionally grown which appears to be more liable to rust attacks; and another distinct type is known as *mudiyā* which is a much later variety and has a soft grain of yellow colour.

Turning now to the second class of wheat, *jalālia*, so common in the Hoshangābād District, is but rarely grown here and together with the similar variety *hānsia* has been largely ousted by the *pissī* wheats. There are several different types of this wheat which differ slightly in chaff, colour and a few other minor points. The grain is large and thick and of a pale golden colour. This variety is specially famed for its quality as it is supposed to give the best flour for the manufacture of *sūji*, but it requires good land and generous treatment and in addition is very liable to damage by wild animals and is subject to rust. *Kathia* also consists of several types which have not as yet been properly worked out. Like *jalālia* it possesses a long stiff beard and the chaff may be either white or red in colour. The big chaffed large-headed types are generally called *kathia* and possess large dull coloured red grains hard for the most part but containing a number of soft and 'Mottled (*kodya*)' grains in the sample. A small headed variety with shining white chaff and small bright hard red grains is sometimes distinguished by the name of *pissī kathī* or simply *kathī*. This wheat has the reputation of being hardy and drought resistant but its quality is inferior.

The amount of seed grain varies with the soil. When *kābar* is ploughed the furrows are much closer together than they are in *mund*. This is the reason why 120 lbs. of seed per acre is the quantity usually sown in *kābar* lands, while 90 lbs. per acre is sufficient for *mund*.

In *bandhwās* or *uksānari* fields cultivation is neither so laborious nor expensive as in those fields which do not possess the same advantages. In embanked fields which fill well, but one harrowing is given just before the monsoon sets in. During the rains the water is allowed to stand on the land until the month of September when the water is let out through the *moghā*, which is either a sluice or a cut made in the embankment. When the water has entirely drained away and the soil is sufficiently dry one operation with the *nāri* or seed plough is sufficient to complete the cultivation of the field. Wheat is not weeded and the harvest takes place in March. The cultivation of *tagar bandhia* and of unembanked lands is a more laborious business; the general method is to plough twice, then to harrow, and finally to

sow with the *nāri*. Wheat is sown in October and November; a common test as to whether the time for sowing has arrived is to place a piece of cotton steeped in *ghī* on the field. If the *ghī* solidifies during the night then the seed can safely be entrusted to the ground. But the local *purohit* has also to be consulted, and unless the omens be favourable no sowing is attempted.

Wheat export trade.

126. Large quantities of wheat are exported to Europe, more particularly the British Isles, in a normal year. The variety chiefly in demand is *pissī*. This variety is peculiarly suited for the British market as although not such a 'strong' wheat as some of the best Canadian varieties, its grain is easy to grind and the flour is chalky white producing a very white, nice textured bread which is in great popular demand at the present day in the United Kingdom. The best samples of *pissī* contain a high percentage of large soft white grains. Any shrivelled or heated grain or the presence of any hard yellow or red grains in the sample lower its value in proportion. So much is this the case that *mundī pissī* which possesses a harder grain than *sikarhai* is reckoned as an admixture in a sample of *pissī*. In consequence trade samples of *pissī* from the Jubbulpore District which frequently consist of a mixture of *sikarhai* and *mundī* as a rule fetch a lower price than the fine *pissī* of the Seonī and Saugor Districts, which frequently contain 90 per cent. or more of soft white grains. The hard wheats such as *jalālia* and *kathia* are not suitable for the English markets as they are hard to grind and give a bad coloured flour but the former especially if produced in sufficient quantity and if market rates were favourable would meet with a steady demand in the South European countries for the manufacture of Macaroni and Semolina for which purpose it is eminently suited.

Rust.

127. Rust occasionally causes great damage to the wheat crop and appears to be more prevalent in the embanked lands probably because of the damper situation. There are three kinds of wheat rust found in India namely :—

Puccinia graminis	...	Black rust.
,, *glumarum*	...	Yellow rust.
,, *triticini*	...	Orange rust.

The former variety is by far the commonest in these Provinces, but there is reason to believe that the two latter which are the commonest in the United Provinces also occur in the Jubbulpore District, and it is possible that in bad rust years they are abundant. Black rust is first indicated by the presence of brick red powdery spots on the stalk and lower leaves; then the spots which consist of a collection of spores are afterwards replaced by black spores which give the characteristic blackened appearance to wheat attacked by this disease. Black rust is a late variety rarely appearing before the first week of February. Its spread is very rapid under favourable conditions which are cold nights and cloudy days at the above-mentioned time of the year. In moderate cases of attack the grain is only shrivelled but in bad cases no grain at all is developed.

Smut (or *kundia* as it is called by the ryot) is another kind of fungus disease in which the ear instead of producing grain produces a number of black powdery spores. It is fairly frequent but the damage caused by it, as compared with rust, is very slight. A bitter wind called the *tusār* will also shrivel the crop and is much dreaded.

'Māgh nachhattra barse asrāra
Kuānrai agiā, Maghai tusāra.'

That is to say heavy rain in September means *agiā* in the kodon and damage to the wheat from the *tusār* in January.

Wheat mixtures.

128. Wheat is frequently sown mixed with gram. The mixture is known as *birrā*. Common proportions are roughly 30 per cent. of gram and 70 per cent. of wheat in *kābar* soil; in *mund* the proportion of gram may be 15 per cent., but no uniform practice determines the amounts. Undoubtedly the crop which yields the best results on *kābar* is *birrā*. Gram being a leguminous plant affords the supply of nitrogen which renders the wheat especially good. Wheat and linseed form another mixture, but this is seldom sown. Wheat, linseed and tiurā, or wheat, gram and tiurā form a mixture known as *gajrā*, the tiurā being picked when green is used as fodder.

Gram (*Cicer arietinum*).

129. Gram is another important crop in this District and covers 130,000 acres. There are three varieties:—

(i) *Haldia*; (ii) *Imalia*; (iii) *Parbatia*.

Haldia is a yellowish, *imalia* a red, and *parbatia* a white grain. The last is seldom sown.

The method of cultivation is similar to that of wheat, but not so much trouble is taken over the preparation of the land. Gram is sown both by means of the *nāri* and broadcast. The amount of seed grain varies with the soil from 60 to 90 lbs. per acre. The green tops of the plants are gathered and eaten as a vegetable. 'Be sure and sow gram,' runs a rural saying, 'there may be empty pods but there will still be something for the pot'.

Barley (*Hordeum vulgare*).

130. This crop is increasing in favour but covers an area of only 5900 acres at present. There are but two varieties—the bearded (*sikarhai*) and the beardless (*mundi*); they belong to the sub-species *hexastichon* or six-row barley as the grains are arranged in six ranks along the ear. Both possess a white hard grain. The method of cultivation is as described for wheat. Barley is less liable to disease and climatic injury than wheat, but is affected by the same causes. Barley rust, although apparently the same species as the common wheat rust, is incapable of infesting the latter crop.

Peas (*Pisum arvense*).

131. Only some 2700 acres of land are sown with peas. Two kinds of peas are sown, one white, the other green. The white pea is the larger. The amount of seed required per acre is 40 lbs. The chief foe of the pea is the caterpillar. But frost, the *tusār* wind and various kinds of blight a'so attack the plants, more especially in the black embanked soils in damp seasons.

Masūr or lentil (*Ervum lens*).

132. Masūr covers, roughly, 40,000 acres of land, but one variety is sown, the red. Masūr is grown on low-lying land or in embanked fields and is often found as a second crop after rice. The amount of seed grain required per acre is about 60 lbs. Masūr is sown both by means of the *nāri* and broadcast. The *uterā* or *chilkā* method of sowing is sometimes employed; that is, in the case of fields where the rice crop is a late one masūr is sown broadcast while the rice is still standing. Masūr in embanked lands frequently suffers from the attacks of frost.

Tiurā (*Lathyrus sativus*).

133. Tiurā is only grown on about 1000 acres of land. There is but one variety. The amount of seed grain required per acre is 40 lbs. The same methods of cultivation are employed for tiurā as for other *rabi* crops. The disease called 'lathyrism,' which is caused by a diet of tiurā and which affects both animals and human beings, is not common in the Jubbulpore District.

Linseed (*Linum usitatissimum*).

134. This valuable crop covers an area of about 50,000 acres. It is very largely exported, and were the crop not so delicate would be more extensively grown. There are two varieties and there is little to choose between them. The seed of the white flowered plant is a greyish white, that of the blue flowered variety is red. The latter is the most popular variety and is reputed to yield more oil and to be the hardier of the two. But Dr. Leather's analysis shews that white seeded linseed has practically the same oil content as the red seeded variety; and it fetches a better price in the market. It may not be so hardy as the red seeded variety but Mr. Evans of the Hoshangābād Farm states that there is little to choose between the two. Linseed is sown either by means of the *nāri* or broadcast and is found on almost every variety of soil except *sehrā*. It is often sown in rotation with wheat. The amount of seed grain required is from 20—30 lbs. per acre. Being poisonous to cattle it is often seen as a protective border round other crops. This crop is very capricious in its early stages of growth—germinating well frequently but afterwards drying up when an inch or so high if an especially warm day occurs at this stage. It is a crop that requires long rotations as if sown frequently on the same land it does badly. Linseed is more susceptible to frost and rust than any other crop. The only variety of rust which attacks linseed in India so far as is known to the Agricultural Department is *Melampsora lini.* Major-General Sir W. H. Sleeman relates in his 'Rambles and Recollections' how the linseed crop in the Jubbulpore District was attacked by rust. The people came to him panic-stricken and begged his assistance. He advised them to tear up all the linseed crop and hurl it into the tanks which are so great a feature of this District, and this was at once done. The

wheat crop was unaffected and yielded a good crop, and this result was attributed to the wisdom of the 'Sarkār'. But, as Sleeman himself observes, the 'Sarkār' could claim no credit for the escape of the wheat; for, had the particular form of rust which had attacked the linseed been one to which the wheat was liable, infection must have spread to the wheat from the linseed plants which were yellow with the rust. The rust which attacks linseed (*Melampsora lini*) is quite a different genus from the wheat rusts *Puccinia*. This observation, it need hardly be added, was made by Sleeman in the light of subsequent experience of this ravaging disease the spread of which is extraordinarily rapid.

Other spring crops.

135. Under 'other spring crops' are placed the following varieties—

Name.	Area sown in acres.	Head under which shown in the village papers.
Rājgir	113	Other cereals and pulses.
Andi or castor (*Ricinus communis*).	121	Other oilseeds.
Dhanā or coriander	448	......
Chillies (*Capsicum frutescens*) ...	410	Condiments and spices.
Ajwain (*Carum copticum*)	98	......
Potatoes (*Solanum tuberosum*) ...	369	Garden crops.
Brinjals or *Bhatās* (*Solanum Melangena*).	576	Do.
Yams (*Dioscorea*)	250	Miscellaneous food crops.

It will be seen that none of these crops are extensively cultivated. None are grown to any remarkable degree of perfection in this District and they call for no detailed comment in this Chapter.

The kharif Rice. (*Oryza sativa*).

136. Rice is an important crop and covers 150,000 acres. The varieties of this crop are so numerous, and the distinctions between them often so subtle, that any attempt at exhaustive treatment would be futile.

Rice falls under two main heads :—

(I) early ; (II) late.

The following are the most popular early varieties :—

Niwāri ...	... brown and flat.
Lakhowā ...	... red and long.
Basmatia ...	... brown, flat and small.
Rāni kājar ...	... brown, black pointed.
Kardhanā ...	... black and long.
Saraia ...	... black husk, red grain.
Sikia ...	... brown and long.
Bakia ...	... brown, smaller than *sikia*.
Kosamkhand	... brown and small.
Bhatāphūl ...	... black and flat.
Dhanādhān	... brown and round.
Bhāgmuchh	... thin and long.

The names of a few only of the late varieties must suffice :—

Antarbed ...	... red and long.
Dilbakshā ...	... brown, round, thin grain.
Badāmphūl...	... red and small.
Sironj ...	... brown and long.
Somkirchā ...	... brown and thin, long grain.
Harad gundi	... brown, a fine grain.
Tulsibāsa ...	... brown, long, and fragrant.

How and why there come to be such a multitude of names for grains bearing a resemblance to each other often so close as to puzzle the son of the soil, the people themselves are unable to explain. Rice lands are generally ploughed twice and harrowed once after the rains set in, though, should there be rain in January or February, the industrious take the opportunity of giving the soil a preliminary ploughing. The *jhūra* or *boar* broadcast method of sowing is the most common. It involves the least labour and gives the poorest results. The *machawā* method is more complicated. The grain is soaked and then kept in a dark room until it germinates. After germination it is sown broadcast on a field expressly 'puddled' to receive it. The best method and that least employed, involves transplantation (*ropā*) and more trouble than most cultivators care to incur. A plot of land, generally manured, is 'puddled' and sown with rice. The cultivator then carefully prepares his fields to which the seedlings from the plot are transplanted. The yield is much increased by this method which, however, is generally only employed for the superior kinds of rice. Sowings are made

from the beginning of the rains until the middle of August; *machawā* seed is prepared shortly before the rains are expected to break. A few fields are ready for cutting in the middle of September, but the bulk of the harvest is reaped from October until the middle of November. Water is not allowed to stand on rice fields until the end of August when the *moghās* or cuts in the embankment are closed and an endeavour made to keep the water in the fields at a constant depth of about a foot.

A necessity is an ample and well distributed rainfall; for the crop is a prey rather to the unfavourable influences of the weather than to disease. In years of scanty rainfall caterpillars generally appear and play great havoc. A special kind of caterpillar which the native call *ghormukhi* is the most fatal insect foe which rice possesses. In years when the rainfall is excessive and unevenly distributed, rice plants develop a disease called *phāpha* the symptoms of which are a yellow appearance followed by shrivelling. The rice plants attacked by this disease fail to come to ear. Rice fields are sometimes, but not generally, manured. The manure is spread over the fields in June and then ploughed in.

Juār. (*Andropogon sorghum.*)

137. The riverain areas of the Nerbudda and Hiran known as the 'Kanthār' fringe the black soil plain of the 'Haveli'. In the north-east of the District there are well-drained slopes in the country through which the rivers Mahānadi and Umrār take their course. Juār is grown almost exclusively in these tracts, and covers an area of 40,000 acres. There are nine varieties of juār and they are distinguished as follows:—(1) *Badrā*, (2) *Jhulrā*, (3) *Safed*, (4) *Suwar Gorda*, (5) *Dūdmogra*, (6) *Dudhinā*, (7) *Hātipao*, (8) *Chitri*, (9) *Ghinsia*. *Badrā* is a large grain, either white or yellow, prolific and more grown than any other variety. *Jhulrā* and *safed* are white grains, smaller than *badrā* to which they are supposed to be superior in flavour. *Suwar gorda* is a large grain. The plant of this variety does not exceed four feet in height and the stem and head bend towards the ground. It can therefore be easily eaten by wild pigs. *Dūdmogrā* is a white grain. *Dudhinā* is a yellowish grain. The grains of *dudhinā* appear as one, but when picked it can be observed that what seemed a single

grain is, in reality, two distinct grains in close proximity. *Hātipao* is a small plant, with a big head of yellow grain. *Chitri* is a white, small grain with a scattered head, while *Ghinsia* has a blackish tinge and a sweet taste.

Juār requires a well drained soil thriving best on sand loams. The amount of seed sown varies from 5 to 8 lbs. and depends mainly on the size that the plant, which requires room, will attain on the various descriptions of soil. The *bakhar* is thrice run over juār lands before they are sown; twice before and once after the rains break. The seed is then sown and the land again *bakhared*. If the land be *kāns* infested or covered with weeds it must be ploughed once or twice before the seed can be sown. The crop must be weeded in August, and sometimes requires a subsequent weeding. Sowings of juār are made in the beginning of July, and the harvest takes place in November and December.

Kāns, *kundi*, and *agiā* (*Striga lutea*) weeds are most dangerous to the juār plant. *Agiā* springs up in the middle of September if the rainfall be very short and is almost impossible to cope with. The crop is also liable to the diseases known as *dudua*, *bhinkā*, *pungi* and *kanhi* or smut. The first two diseases may be described as the water-logging of the plant's fabric owing to excessive rainfall; *pungi* is caused by minute insects. *Kanhi* or smut appears when the crop has reached maturity. A head of juār affected by smut appears of a curious lavender colour, and if touched will leave the smut on the hands. The *purwaia* a north wind blowing towards the end of October when the crop is in flower often inflicts considerable damage. Juār is, generally speaking, neither irrigated nor manured, but it attains great perfection when grown on the small *bāri* or garden plots close to human habitations.

Tūr or arhar (*Cajanus indicus*.)

138. This crop covers an area of about 5500 acres, and is generally sown with juār and cotton. Sowings are made in June and July and harvestings take place in February. But one variety is sown, the red, and about 5 or 6 lbs. of seed grain are required per acre. The variety being a late ripening one occasionally suffers from frost especially in low-lying fields.

Bājra (Barā jhādwāla)
Bājri (Chhotā jhādwāla)
(*Pennisetum typhoideum*)

139. *Bājrā* and *bājri* are distinguishable only by the size of the grain. *Bājri* is the smaller. The area under this crop is only 1300 acres, and it is sown on the poorer kinds of soil. Land required for *bājrā* or *bājri* must be ploughed once and *bakhared* twice. Sowings are made in July, and the crop is reaped in November. One or two weedings are required. The amount of seed grain is generally 10 lbs. per acre. The crop is a hardy one but is sometimes damaged when in flower by the *purwāi*. *Bājra* and *bājri* are not manured or irrigated.

Maize *makka*.
(*Zea mays*).

140. Maize is a popular garden crop and covers about 9000 acres. It is sown in June and July and reaped in September and October. The seed is sown broadcast on the *bāri*, which is always in close proximity to the house and well manured. No weeding is required. 'Sow maize and juār,' say the people, 'and be independent of the rainfall.'

Urad and Mūng.
(*Phaseolus radiatus* and *P. mungo*).

141. These crops cover an area of some 13,000 acres, of which about 1000 acres are under *rabi* sowings. The *kharīf* varieties are sown on poor soils, the *rabi* on soils retentive of moisture. The quantity of seed grain required per acre is about 8 or 9 lbs. The land is ploughed once and *bakhared* twice before the seed is sown broadcast. The *kharīf* varieties are sown in the month of June and reaped in October and November. The *rabi* varieties are sown in the month of November and reaped in February. The crop is not grown in embanked fields and requires no weeding. It is neither manured nor irrigated.

Kodon.
(*Paspalum scrobiculatum*)

142. This is one of the staple crops of the District and covers an area of 195,000 acres. The crop is grown on almost every kind of soil and in favourable years yields remarkable outturns. The following varieties are found :—(1) *Bisbaria*, (2) *luma*, (3) *basin*, (4) *ledri*. The first two varieties have a large grain and are called kodon, the last two which have a smaller grain are called

kodeli. The quantity of seed grain required per acre is from 16 to 20 lbs. The field is generally *bakhared* twice before kodon is sown. Sowings are made in June and July and the harvest takes place in November and December. The weed called *agiā* is a great enemy to this crop. But kodon is a strong, virile millet requiring neither irrigation nor manure.

143. This crop is not extensively sown in this District. Its grain is only about one quarter the size of that of kodon, which crop it closely resembles. Kutki is generally sown on land which has been broken up from fallow, and ploughed four or five times. Sowings are made in August and the crop is reaped in November. About 16 lbs. of seed grain are required per acre. This millet will not thrive on the poorest soils as kodon does, but

Kutki.
(*Panicum psilopodium*).

Tin pākh do pāni
ain kutak dé rāni.

'Three fortnights and two showers of rain
And kutki ears are full of grain'.

144. Til is an important crop and covers 82,500 acres, of which about five-eighths are under *kharīf* til, and the remainder under *rabi*.

Til
(*Sesamum indicum*).

Four or five varieties of til are grown in the Jubbulpore District.

1. White large seed 2. ,, small seed 3. Red 4. Black	*Kharīf*—sown in rains.
5. *Maghai* or *Magheli* dark brown seed.	*Rabi*—sown in first half of September.

White til fetches the best price and black the worst. Til is exported in large quantities to the South of France where it is mixed with olive oil to form the Lucca oil of commerce. *Maghai* til frequently suffers from frost if any occurs in December. It might with advantage be replaced by the grey seeded *maghai* til grown in the Nāgpur Division which is of better quality and fetches a better price. Even on the poorest classes of soil, broken up from a fallow of

some five or six years, a handsome outturn is obtained from the crop. Til is not grown on embanked fields, and does not require much moisture. The land is well ploughed and *bakhared* before sowings are made. After the seed is in the ground the *bakhar* is inverted and run over the ground to press the seed home. This process is called *pahtā*. The crop seldom requires weeding, though the usual *kharīf* weeds such as *dūba*, *kāns*, *agiā*, *gumni* and *chunwaiyā* are found with the crop.

The *kharīf* varieties are sown in the months of June and July and cut in November; the *rabi* varieties are sown in August and up to the middle of September and harvested in December and January. If rain does not fall soon after the germination of til an insect called the *chiddā* or *chitu* appears and destroys the crop. If too much rain falls a black insect called *māhu* destroys the leaves of the plant. Til is neither manured nor irrigated. The amount of seed grain required per acre is from 3 to 6 lbs.

Sugarcane (*Saccharum officinarum*).

145. The sugarcane covers only 900 acres. It is thus of small importance in the economy of the District. The methods of cultivation are primitive and the mill generally used is the mortar and pestle arrangement called the *kolhū*, or the wooden roller mills known as the *gundi* or *charkhi*. Not one of Messrs. Thomson and Mylne's 'Beheea' mills is known to exist in the District. The *gur* is of very inferior and dirty quality and people who want good *gur* use that imported from Betūl and elsewhere.

The straw coloured variety of cane is the only one that yields good *gur*. The large purple canes yield a watery and very inferior juice. The Otaheite cane which was introduced into India by Sleeman in 1827, and was first planted in the Government Botanical Garden at Calcutta, belongs to the genus *Saccharum violaceum*. This cane, or rather its degenerate offspring, is the variety now regarded by the people as indigenous. They regard the comparatively worthless cane which is used for eating and which is really indigenous, as having been introduced by the English and they call all such cane *angrezi*.

Sugarcane cultivation has much declined since the year 1868 when this crop covered an area of 3496 acres.

146. The area under cotton is roughly 12,000 acres. It is grown almost exclusively in the *Kanthār* tracts of the Jubbulpore and Sihorā tahsils, and generally found mixed with tūr. The crop requires weeding twice and is much damaged by heavy rain in October.

Cotton. (*Gossypium herbaceum.*)

Barse swāti sānt bisānt
Chale na rehtā, baje na tānt.

'October's rain leaves the spinners wheel idle'.

Minor crops.

147. Under this head are placed the following :—

Name of variety.	Area sown in acres.	Head under which shown in the village papers.
		... ...
1. *Samā* (*Panicum miliare*) ...	4,518	
2. *Madia* (*Elusine coracana*) ...	301	Other cereals and pulses.
3. *Kākun* (*Setaria Italica*) ...	221	......
4. *San*-hemp(*Crotolaria juncea*)...	7,503	Other Fibres.
5. *Amāri* (*Hibiscus cunnabinus.*)	148	Do.
6. Mangoes...	9,845	Groves.
7. *Bhindi* (*Hibiscus esculentus*)...	53	Garden crops.
8. *Bhatā* (Brinjals)	176	Do.
9. *Saklā* (sweet potatoes) (*Ipomœa batatas*)	209	Miscellaneous food crops.
10. *Singhāra* (water nut)	230	Do.
11. *Mahauri* (Yams)	60	Do.
12. *Gājar* (carrots)	75	Do.

Of these crops three only call for comment, *viz.*, *samā*, *san*, and mangoes.

There are four varieties of *samā* :—(1) *Samai*, (2) *rajhia*, (3) *bansia*, (4) *muthia*. *Samai* grows a compact head of large grain : the head of *rajhia* is by no means compact and the grain is sweet; *bansia* is similar to *rajhia* though the grain is smaller. The grain of *muthia* is white.

Sowings are made in June and the crop is reaped in September. The amount of seed grain required is from 8 to 12 lbs. per acre. Neither weeding manure, nor irrigation are necessary.

San-hemp is not really a hemp at all. There appears to be every chance that the cultivation of this crop will be largely extended as the qualities of the fibre gain more universal appreciation. The place of *san* as a fibre has been

taken by jute, but experiments are now being made with a view to ascertaining the possibility of putting *san* fibre to uses for which jute is unsuited and the results will be awaited with interest *San* must be very thickly sown and grown with the plants close together when cultivated for fibre. *San* is also valuable as a green soil manure. The District is exceptionally well off in the matter of mango groves. In 1868 no less than 8000 acres were granted revenue free during the maintenance of the groves standing on that area, and since then resumptions of groves have been very few indeed.

Rotation of crops.

148. Rotation as understood and practised in high farming is not to be found in the Jubbulpore District. The same field will bear rice or wheat year after year without variation. The soils termed *patarua* and *bhatuā* which are extremely poor require resting fallows of three and five years respectively; but the requisite treatment is not always afforded. Good cultivators will not sow kodon for more than two years in succession in the same field, but will change to til or, if possible, one of the *kharīf* pulses. In villages in the tract known as the *Kanthār*—the riverine area of the Jubbulpore tahsīl—fields sown with gram the first year are sown with cotton the next, while in the third year juār is sown. In the fourth year gram is sown again, and after this crop the field is described as *doil* or ready for a sowing of cotton.

Manure.

149. Much remains to be done in the matter of persuading the cultivators of this District to conserve and use the natural manure at their disposal. At present a great deal is used as fuel, still more is wasted, and a small quantity is used in the most unscientific manner on *bāris* (small plots adjacent to the village site) and on rice fields. The present potential supply of manure is not sufficient for more than about one-twentieth part of the area under crop and unless conserved carefully would not serve even as much as one-twentieth part. But increased outturns would, of course, result in an increase in the livestock of the District and better methods will, no doubt, arrive with the gradual increase of the pressure of population on the soil and the spread of the spirit of thrift and self-help.

Rainfall.

150. Cultivation is dependent not so much on the actual amount as on the timely distribution of the rainfall. In recent years the rains have not set in until June has well advanced. At first a small quantity of rain, not too heavy but falling in gentle showers, favours ploughing and the sowing of the *kharīf* crops. Heavy rain towards the middle of July is of great benefit ; the rice seedlings have developed sufficiently to withstand the downpour and the embanked wheat fields fill with the water they require. Some 20 days of rain during August yielding about 10 inches, rather less during September, and in October a gradually decreasing rainfall ceasing towards the third week of the month satisfy the cultivator. Heavy rain after October will delay *rabi* sowings ; a few showers in December and January benefit the *rabi*, but a damp and cloudy spring will induce rust in wheat and linseed in embanked fields and favour the appearance of caterpillars amongst the other crops.

A rainfall of from 45 to 50 inches distributed in a manner somewhat resembling that described in this paragraph, with breaks at the junctures which the various operations of agriculture require, is quite sufficient for the necessities of the District.

Agricultural implements.

151. The agricultural implements in use in this District may be described briefly. The plough is the *hal* or *nāgar*, made of wood and shod with iron. The harrow is sometimes entirely of wood, sometimes of wood and iron, and is called the *bakhar*. Without the *parenā*, or goad, the oxen would not draw the plough, and without the *dhulia*, or seed basket, the *nāri*, or seed plough, could not be fed conveniently.

The *nāri* is a plough which leaves the seed in the furrow by means of a hollow bamboo into which the grain is passed, a boy filling a broad wooden cup at the top of the bamboo as the plough progresses. Sometimes the seed fails to pass through the bamboo which becomes clogged and the furrow remains unsown for some distance. Other implements used are the *khurpi*, an indigenous hoe, for weeding, the *hansia* or sickle for reaping, the wooden rake or *pācha*, the winnowing basket or *toknī*, the three-legged stool or *tipai*, and the broom *bahari*.

IRRIGATION.

152. The irrigated area is small. The figures given below are of interest :—

Statistics.

	Irrigated area.
At settlement	2,831 acres.
1902-03	3,438 ,,
1903-04	3,416 ,,
1904-05	4,579 ,,
1905-06	3,656 ,,
1906-07	3,211 ,,

Irrigation is from wells and tanks and seldom from rivers. Most of the area consists of vegetable gardens irrigated from wells by Kāchhis. There are 1185 durable and 1373 temporary wells in the District which are used for irrigation and these serve on an average about an acre each. A full description has already been given in this chapter of the system of embanking land which is so characteristic of the cultivation of the District. This system confers nearly all the benefits of tank irrigation and is free from some of the defects of well irrigation which has been known to exhaust the soil. At settlement 404,274 acres were recorded as embanked wheat land.

The following account of the Government irrigation works in the District has been supplied by Mr. W. H. Todd.

153. The preliminary examination of the Jubbulpore District by the Public Works Department with a view to finding suitable sites for the construction of Government irrigation works was started in 1901. In the following year two experimental works were opened at Silpuri and Parāchitāl in the Sihorā tahsil. These two are typical of all the others that have since been started, for the one at Silpuri is what is known as a tar scheme, whereas the other at Parāchitāl is a storage tank, and no third form of irrigation work has since been attempted elsewhere in the District.

Government irrigation.

The tar scheme is an anicut across a perennial stream, or across a nullah in which water flows during the irrigation season. The level of the water in the nullah is raised to about bank level by the construction either of an earthen embankment or a masonry dam across it, so that command may be obtained of the country on either side. In the first



Bemrose, Collo., Derby.

NIWAR "TAR" SCHEME.

case a waste weir must be provided beyond one flank of the earthen embankment, but in the second the flood waters are allowed to fall over the masonry dam. The latter scheme is the simplest and cheapest, but can only be adopted where good solid rock foundations are obtainable in the nullah bed. Since 1901 a great number of projects and schemes have been investigated and surveyed all over the District, but only the most promising have up till now been chosen for construction. Of these at the present moment, *i.e.*, the end of 1908, there are in all 15, four of which are completed and the rest still under construction. Three of them are tar schemes, and the rest storage tanks. One is a major tank, *viz.*, the Barerā Kalān tank in the Sihorā tahsīl and its estimate amounting to Rs. 1,34,714 has recently been sanctioned by the Government of India. The combined estimates of the selected projects amount to Rs. 6,14,054, and a total area of 63,000 acres will be commanded; of this it is estimated that it will be possible to irrigate 27,000 acres per annum, half in the *kharīf* season, and half in the *rabi*. Cultivators will pay Rs. 2 per acre irrigated for each crop, and Rs. 7 per acre for sugarcane. Although there is no prospect of the construction of a large canal, the Jubbulpore District is very suitable for the adoption of these minor schemes, for not only are there many nullahs in which water flows till quite late in the season, but the general configuration of the country also lends itself in a remarkable way to the economical storage of water. Such sites have been chosen where sufficient command can be obtained of *kharīf* land, and of the lighter *rabi* soils. Considerable success has already been met with in the irrigation of the latter, both at Silpuri and Parāchitāl, but irrigation of the heavy bunded Haveli areas has as yet not been attempted. The Parāchitāl tank and the Silpuri tar scheme were both completed in 1904-05. That year water for irrigation was given free. The following year at Silpuri 58 acres of *kharīf* and 234 acres of *rabi* and at Parāchitāl 58 acres of *kharīf*, 37 acres of *rabi*, and 38 acres of sugarcane were irrigated. In 1907-08 at Silpuri 56 acres of *kharīf* and 245 acres of *rabi* and at Parāchitāl 211 acres of *kharīf*, 156 acres of *rabi* and 28 acres of sugarcane received water. The Parāchitāl tank thus yielded a revenue of Rs. 600 which on the capital outlay which was

only Rs. 15,817, represents a return of nearly 4 per cent. The best example of a tar scheme is to be seen at Khitoli, which is situated at the extreme north-east of the District in the Murwāra tahsil. This work was completed in 1907-08 at a total cost of Rs. 40,031. The first year, as is the general custom elsewhere, the water for irrigation was given free and a total area of 1,200 acres of *kharīf* and 600 acres of *rabi* was irrigated by the cultivators, although previously irrigation was almost an unknown thing in those parts. It should be noted however that this happened to be a year of exceptionally short rainfall. Elsewhere in the District the cultivators are generally inclined to be apathetic towards irrigation until they become aware of the great benefits to be derived from it, and are very tardy in taking the water to start with. Since work commenced in 1903 to the end of 1908 a total sum of Rs. 3,31,391 has been expended in actual construction, of which Rs. 1,50,800 were spent in 1907-08.

CATTLE.

154. Statistics. The following table shows the number of cattle in the District in 1906-07 :—

	1906-07.
Bulls and bullocks	188,989
Cows	122,129
Bull buffaloes	7,199
Cow buffaloes	49,170
Calves	164,638
Sheep	15,547
Goats	52,295
Horses	17,937
Mules	129
Donkeys	514

155. Source of supply. Many of the cattle used for agricultural purposes in this District are bred in the Murwāra tahsīl, parts of which have long been used as grazing and breeding grounds. But want of care and knowledge have resulted in a small and inferior stamp of cattle with small powers of resistance to disease. Weekly cattle markets are held at Majholi, Panāgar, and Shahpurā, and animals for sale are brought from the adjoining Districts

and Native States. Cattle are also brought from the important annual fair at Garhākotā. Travelling cattle dealers frequently pass through the District. Most cultivators breed their own cattle, though they cannot always supply their own wants in this manner. In the Murwāra tahsīl nearly every tenant owns at least 6 cows; many own large numbers of milch kine and sell much *ghī*. In the Havelī villages of Jubbulpore and Sihorā grazing is scanty, and the average tenant will keep two cows, or perhaps two buffaloes, for his household requirements.

156. With good management a buffalo should bring in a clear monthly profit of Rs. 4, at the least, and a cow Rs. 2. If a buffalo calve in June or July and remain in milk without being sent to the stud again, she will continue to yield for about a year. If put to the stud as soon as ready she will yield for about six months. As long as she is in milk a buffalo receives about one seer of oilcake and one of cotton seed daily and, in the cold season, a large basket full of *ber* leaves. But the cow is not so fortunate; and if the owner does give any food he grudges it. It is difficult to account for the difference in treatment; a reason may perhaps be found in the fable which concerns the creation of the buffalo. Parmeshwar made the cow for the benefit of man. Man was not in the least grateful; on the contrary he considered that the aspect of the cow was ridiculous and received the beast with scornful laughter. 'Very well!' said Parmeshwar, '*you* are doubtless a great deal cleverer than your appearance would have led me to expect. Let me see what *you* can make!' After repeated attempts to make something really pretty man produced the buffalo. It may be that those who believe this legend are partial to the animal in the creation of which they conceive themselves to possess an inherited interest.

Prices and produce.

The quantity of milk which the buffalo gives is not less than 3 seers a day, and this quantity can be increased to seven or eight seers with an attention to diet which is seldom, if ever, given. A cow left to pick up a living as best it can gives about a seer daily and a little care will result in a very much increased yield of milk.

Large quantities of *ghī* are exported from this District towards Calcutta even as matters now stand. The introduc-

tion of fodder crops, *silos*, and discrimination in breeding, the protection of cattle against disease by means of inoculation, and the adoption of clean and business-like methods of dairy farming might well transform many of the precarious *kharif* villages in the District into estates of great economic security. Further any steps which would help to increase the available supply of natural manure—which is exactly that manure which the peculiar soils of this District stand in need of—and to interest the people in the conservation of manure must advance the prosperity of Jubbulpore. Nothing could be more instructive than the enormous difference between the outturn of rice land which has been manured and that which has been left to leach and grow comparatively sterile. The price of a bullock ranges from Rs. 25 to Rs. 40 ; very bad or very good animals may sell within a wider range. A cow will cost from Rs. 8 to Rs. 20 ; and a buffalo from Rs. 40 to Rs. 60.

The treatment of cattle.

157. The cow is left to find what it can to eat, no attempt being made to prevent great deterioration in health and condition during the hot weather. The consequence is that when the first green grass appears after the arrival of the rains the starving beast gorges itself and dies, the annual loss caused to the cultivator being very large indeed.

Plough bullocks are tied up in the shed shortly before the rains commence ; for the preliminary harrowing (*khararni*) marks the commencement of their working season.

From this time until August the bullock is stall fed, his master giving him grass and water and, if he be wise and thrifty, *bhusā*. The first harrowing over the bullock is considered to have earned a feed of grain, and during the rains half a pound of salt is added to his ration once a week, instead of once a fortnight as during the rest of the year. The buffalo, it may be mentioned, gets half a pound of salt every fortnight; the cow should get a handful once every month, and sometimes does.

From August to November the bullock is sent out to graze and dry grass is given him at night. The quantity of food is increased towards the time of *rabi* sowings, and when the work of ploughing is in progress a bullock must be fed liberally. Later, green tiurā is picked as fodder and, once the crop is on the threshing floor, the animal is not muzzled

when treading out the corn. When the harvest is over the bullock grazes the stubble on the wheat fields.

It is during the hot weather, however, that plough cattle most require the care and attention of their owner.

The matter is well expressed in two popular sayings: 'Look at those bullocks!' cawed the Crow to his mate, 'Their owner gives them neither grass nor salt and us a dinner.' And, 'It is the hunger of April that causes the ox to fall dead in the furrow.'

CHAPTER VI.

LOANS, PRICES, WAGES, MANUFACTURES, TRADE, AND COMMUNICATIONS.

Loans.

Government Loans.

158. Transactions under the Agriculturists' Loans Act have always been small except in years of famine. Between the years 1883 and 1906-07 the total amount advanced was Rs. 5,13,244. Of this Rs. 1,07,293 was advanced in 1894-95 and 1895-96, Rs 2,26,574 in 1896-97 and 1897-98, and Rs. 1,34,389 in 1899-1900 and 1900-01. During the next six years the amount advanced averaged only Rs. 4748 a year. Of the total amount advanced Rs. 4,41,969 were recovered and Rs. 73,151 remitted, the balance due at the end of 1906-07 being *nil*. The amount of interest recovered on these loans was Rs. 46,316 and the amount remitted was Rs. 19,486. Perhaps the most important function fulfilled by the Agriculturists' Loans Act is the mitigation of the worst features of seasonal calamity by providing the people with money for their immediate agricultural necessities at a time when local credit has contracted to the narrowest limits. In normal years the necessarily strict methods of Government are not so attractive to the cultivator as the more seductive methods of the money-lender. The system of joint responsibility, which is supposed by some to contain the germs of the co-operative spirit, has been greatly prejudiced by the frequent default of some borrowers and the ensuing recovery from those jointly responsible with them. The delay which frequently occurs in granting the loans and which is not always unavoidable also militates against the popularity of the system.

The principal scope for agricultural improvements in the District lies in the construction of embankments for the *rabi* fields. Jubbulpore is famous for its embanked land, and the first impulse of a mālguzār or tenant wishing to improve his land is to embank it for wheat. Land so improved retains the water and is rendered independent of the rainfall of Octo-

ber and November which is so necessary for the successful sowing of unembanked soil. Small sums are also expended on repairs to tanks, but the area irrigated is small and the people have not yet realized the capabilities of irrigation so fully as to be ready to borrow money for the construction of tanks. The total amount advanced in Land Improvement Loans between 1883 and 1906-07 was Rs. 90,605; of this amount nearly Rs. 50,000 were granted without interest during the famines of 1896-97 and 1899-00. The grant of loans without interest has been found to produce unfortunate results, for in the scarcity of 1907-08 men actually allowed their fields to remain unsown in the vague hope that the authorities would be melted into issuing this form of relief. The total sum recovered was Rs. 61,895 and a sum of Rs. 19,940 was written off as irrecoverable, leaving a balance of Rs. 8,000 to be recovered. The amount of interest recovered on these loans was Rs. 9930 and the amount of interest remitted was Rs. 1517. One of the most important factors which limit the extent to which loans for land improvements are taken advantage of by the people is the inability of Government to assume the functions of the *sāhukār* or *mahājan*. The tenant who is in a position to make substantial improvements in his fields is generally a man of respectable standing and possessed of considerable credit. As such he is able, especially if the land improved be mortgaged as collateral security, to obtain money from his local banker at a rate of interest which may be as low as 8 and will certainly not exceed 12 per cent. The banker will not, except in rare instances, be unduly insistent on punctual repayment of the loan. If then the tenant who wishes to improve his land takes money from Government for the purpose the sole advantage that he reaps is that of a low rate of interest; on the other hand he runs the risk of offending the man who has supplied him and his father before him with the capital necessary for his social as well as his agricultural expenditure and of thus creating a store of future difficulties for himself.

Sanads for improvements.

159. Since 1896, 181 *sanads* or certificates have been granted for the improvement of land and other works of public utility. Out of the whole number 27 were awarded for making *bandhāns* or large field embankments,

three for constructing wells and one for planting trees. In the remaining cases the work for which the *sanads* were granted is not recorded. The principles which underlie the grant of these *sanads* are, firstly, the encouragement of the cultivator by a visible and tangible token of the approbation of Government and secondly, the provision of a document entitling him to exemption at the next settlement from rental enhancement on the ground of the improvement made. In practice few cultivators care to avail themselves of *sanads*. They are well aware that the Settlement Officer will take into consideration the expense they have been put to in the improvement of their lands during the currency of settlement. Accordingly they prefer to await the advent of the Settlement Officer, before whom they can represent their claims to exemption and obtain a prompt decision on the spot, to a procedure which entails the expense contingent upon the presentation of a petition for a *sanad* through the usual channels. Experience has shewn that the amount of land improvement covered by the grant of *sanads* cannot be accepted as in any way representative of the amount of capital sunk in such works during a given period.

Rate of loans.

160. By far the greater part of rural money lending business is conducted by word of mouth. The *khātā* is frequently unsigned. Mortgages and bonds deal with a small part only of the capital employed in rural finance. Character and reputation are the dominant influences in the money market; men's resources are well known and they are not compelled to give security until their credit becomes strained. The test of character applies to the villages as well as to the individual. Villages can be pointed out in the enjoyment of equal wealth and natural resources which stand on very different levels in the local money market; for, whereas it is well known that the members of one community will pay if they can, nothing short of a decree will extract payment from their neighbours. The chances of recovery may be equally good, but a rate of interest designed to cover the cost of an elaborate recovery cannot depend entirely on the nature of the security offered. A Kurmī, if his rent be fixed by his mālguzār, will probably have to pay a proportionately greater rent than a Brāhman. But when the Brāhman and the Kurmī borrow money the latter's reputa-

tion for resource and business capacity is reflected in a favourable rate of interest. The rate of interest for unsecured loans varies very much; 18 per cent. per annum is usual in good villages. A family who have had business relations with a moneylender's family for many years will borrow at 12 per cent. per annum, but such cases are not numerous except in the fertile villages of the black soil plain. Unsecured loans seldom carry a higher rate of annual interest than 24 per cent. Loans on personal security have been observed in rare cases carrying interest at from 18 to 24 per cent. per annum. The backer is almost invariably a relation of the borrower. Money obtained on ornaments is generally well secured The rates of interest seldom exceed and seldom fall below 18 per cent. per annum. In case of mortgages of proprietary rights 12 and 18 per cent. are very common rates of interest; 6 per cent. has been noted in some cases and 24 per cent. in a few rare cases. All classes of tenants mortgage their land. In the case of absolute occupancy tenants 12 per cent. is the most usual rate; the cases of occupancy and ordinary tenants exhibit rates running from 12 to 37½ per cent. per annum. In cases of mortgage with possession of tenancy land a rate of 24 per cent. per annum is expected by the mortgagee. The account of interest is made up in a peculiar manner; every acre of good wheat land is considered the equivalent of Rs. 8, the scale descending with the value of the land. The mortgagee probably makes a good deal more than his expected 24 per cent., but the matter is interesting in connection with those extremely low estimates of cultivating profits which tenants and landlords are so prone to make. The *jod* or *jore* method of lending money is known in Jubbulpore as the *bandhwār* method under which a specified quantity of grain has to be delivered by a fixed date in repayment of a cash loan, the rate of interest aimed at being not less than 50 per cent.

Co-operative Credit Societies.

161. Co-operative banking in the Jubbulpore District owes its origin to the efforts of Mr. Crosthwaite, Settlement Officer, who has contributed the following account of the movement: The District of Jubbulpore is fortunate in the possession of much mineral wealth and

many potential industries. But however much these resources may be developed the bulk of the population must always remain dependent on the soil. It is because co-operative credit is certain to assist the moral and material progress of the cultivator that it has attracted the attention of Government.

On the 25th March 1904 the Co-operative Credit Societies Act was passed by Lord Curzon and his Council and official cognizance was thus taken of a movement the object of which is to encourage thrift, self-help, and co-operation among agriculturists, artizans, and persons of limited means. The leading principle of co-operative credit is the combination of several weak individual credits into one strong united credit and the attraction and distribution of capital at reasonable rates of interest by means of the union to the units of which the union is composed. The pioneer of modern personal co-operative credit—as distinguished from other forms of the same principles—was Herr Raiffeisen, whose first bank was formed in 1849 at Flammersfeld of which he was Burgomaster. The system of Raiffeisen is animated mainly by moral considerations of intense sympathy with the victims of extreme poverty.

A little later Herr Schulze-Delitzsch established the first People's Bank of the large system which bears his name. The system of Schulze-Delitzsch avoids any mixture of philanthropy with business. The system of co-operative credit pursued in the Jubbulpore District steers a middle course between the ideals of Raiffeisen and the practical but somewhat uncompromising system of Schulze-Delitzsch.

A village society is a mutual society formed, composed, and governed by cultivators themselves for encouraging regular saving and granting small loans on easy terms of interest and repayment. Such a society is a rivulet of the river of banking; it deals with people who are neither cared for nor catered for by large bankers but are left to the tender mercies of the village moneylender with his slender capital and his extortionate rates of interest.

The principal security of a member of a rural society is his character, and it is on mutual trust founded on intimate knowledge of personal character that the fabric of the rural society depends. The student of human nature assumes that

the man who would gladly cheat the money-lender will do his utmost to repay a debt due to a society of his own class.

The principles underlying the Jubbulpore scheme may be thus summarized: small areas (each society is confined to a single village); the enrolment, after careful selection, of a certain number of members of known honesty and industry; the individual and collective liability of these persons for the necessary working capital; no shares; no dividends; all profits devoted (*a*) to the building up of a reserve fund and (*b*) after the provision of an ample reserve fund to works of public benefit; the gratuitous service of all officials; the discharge of all existing debts and an undertaking to borrow from the society only in future; the saving by each member of so many annas in each rupee of his rent every year.

Loans are granted for any purpose approved of by the committee of management to the extent of the credit allowed to each member by the decision of the members in general meeting. No sureties are asked for and all loans are made 'on honour' only. A *bahi khāta* and a *rokhā bahi* constitute the books of account and a short set of working rules is provided.

These societies, the liability of which is unlimited, are financed by the Sihorā Central Bank, Limited, an institution registered under the final section of the Co-operative Credit Societies Act and composed of gentlemen in the District actuated by motives of business philanthropy. This Bank lends to rural societies at 9 per cent. The societies in turn lend to their members at 12 per cent. and carry the 3 per cent. margin to their reserve funds. The Central Bank accepts deposits for 12 months and grants 5 per cent. interest thereon. The Honorary Secretary of the Sihorā Central Bank is Mr. Vishnu Datt Shukul, B.A.

It is important to observe that the rural societies are not in any way bound to go to the Central Bank for their capital. Free annual audit by Government agency is secured to all societies registered under the Act.

It is hoped that the Sihorā Central Bank will eventually be linked up to a large Provincial Central Bank and thus be brought into touch with the great outside world of finance. But this is a scheme for the future. Meanwhile it is most

encouraging to observe that although the first rural society in the District was only registered on the 15th February 1907, there are now (on the 15th January 1909) fifteen societies.

The loans granted exceed Rs. 11,000; and repayment of interest and principal has been punctually made. Spontaneous applications for registration are already beginning to come in, and the possibilities of progress in the District are now assured. But for years to come the co-operative credit movement will require the energies of zealous workers—official and unofficial—and there is no doubt that many such will be forthcoming with the spread of the movement.

Malguzārs.

162. The proprietorship of the mālguzārs was a creation of the British Government at the 30 years' settlement of 1863. Save for certain old Lodhi and Rāj-Gond families, who held on revenue-free or quit-rent grants bestowed by the Gonds or Marāthās (to whom may also be added a few of the official classes, who were given villages over the heads of cultivating patels after the fashion of Marāthā Governments), their connection with the villages of which they were made proprietors was at that time of comparatively recent origin. Upto the annexation by the East India Company of the Saugor-Nerbudda territories in 1818 annual settlements, with frequent ejectment of the patels or managing farmers, were the order of the day; and under British rule a change was not immediately made. Between 1818 and 1834, when a settlement for 20 years was made, there were several short-term settlements made by British officers, of which the longest was for a term of five years. At these short settlements the payment of the revenue demand was the chief test for continuance in the patelship of a village; and creditors were allowed to take over the village farm. 'The greatest 'number of changes in the patelship,' wrote Mr. Russell in paragraph 94 of his Settlement Report of 1867, 'took place 'at the successive short-term settlements; sometimes the 'old incumbent had to give place to a Mārwāri speculator, 'his creditor, who would either have his money or the lease 'of his village. Sometimes the cultivators in a body demanded 'the patel's removal for alleged acts of cruelty and extortion 'at the instigation of a rival claimant, who was then

'installed in the patelship; sometimes from alleged inability 'to manage the village, urged by the pargana officials, who 'had some more obliging and fortunate candidate for the 'village.' The displacement of patels by creditors seemed to have proved distasteful to the local officers, as is shown by a letter quoted by Mr. Russell, addressed in 1834 by the Secretary, Board of Revenue, to the Commissioner of Jubbulpore, in reply to a letter proposing to summarily eject some Mārwāris who had become possessed of villages. The letter ran:—'I am directed to remind you that the Mārwāri '*mahājans* have an equal claim to justice with all other parties 'who may have legally and peacefully acquired a property or 'an interest in land. To eject them, on the ground of hard-'heartedness, from villages which they have taken up in ex-'change for lost capital, would be a direct encouragement to 'the people to break faith with the only class who will at pre-'sent advance money at all, and would operate effectually to 'deter others from coming forward in future.' This declaration, which amounted almost to a recognition of transferable rights in the lease of the village, was followed by the deputation of Mr. Martin Bird, of the Board of Revenue, to make a special enquiry into the revenue management, the result of which was the twenty years' settlement to be made 'with the 'patels in possession, the parties engaging being not liable to 'be removed during the term of the settlement, except for 'default; an assurance being also given of the renewal of 'the lease on condition of good management.' It was also ordered that no lease should be cancelled, or patel be displaced, without the sanction of the Board. This protection of the patel, which was in consonance with the zamindāri school of thought then in the ascendant, lasted during the twenty years' settlement, and paved the way for the conferral of the free gift of proprietary rights to patels which was determined upon at its close. The twenty years' settlement, owing to delays in survey, the interruption of the Mutiny, and the time taken in making the proprietary awards, lasted virtually for thirty years, during which the power of the patel had become consolidated, and out of 2,535 villages dealt with the old patels became proprietors in 2080. In the remaining cases they had lost their rights either by indebtedness, failure to pay their revenue, or misconduct in the Mutiny.

About a fifth of the recipients of the gift of proprietary rights were thus of very recent standing; the rest at the time of the award had held over thirty years, but of this number, many, like the Mārwāris referred to in the letter from the Board of Revenue quoted above, had obtained their villages by money-lending or by paying up often insignificant arrears of revenue. Setting aside, therefore, the representatives of old feudal families of Gonds and Lodhis, there must have been few of the proprietors so created in 1863 who had then any real claims for consideration on the ground of antiquity of tenure.

During the course of the 30 years' settlement 16 per cent. of the villages changed hands; and this percentage would have been still higher but for the intervention of the Court of Wards in several cases. The indebtedness which compelled the proprietors to part with their property was in no case due to the heaviness of the Government demand fixed at settlement but was the result of old debts (due to *mahājans* who prior to conferral of the proprietary right were unable to get the villages auctioned) and subsequent extravagance and mismanagement. Another cause of indebtedness was that many of the villages were in the possession of several shareholders who frequently, owing to their multiplicity, had scarcely enough for their maintenance. Litigation between co-sharers on most trifling and frivolous grounds was another contributing cause. The principal sufferers were the old feudal families many of whom parted with their villages to the moneylenders.

Since the last settlement, *i.e.*, from 1889-90 up to 1907-08, the total number of whole villages transferred was 456 and, in addition, 2740 shares representing a total of 8713 annas. Taking 16 annas to a whole village the shares transferred represent a total of 544½ whole villages. Thus the total number of whole villages transferred in less than twenty years was 1,000½ or 39·5 per cent. of the total number of villages in the District. The Government revenue on these villages was Rs. 2,15,881 and the amount for which they were sold was Rs. 35,20,421, giving a multiple of 16·3 times the Government revenue. Of the total of 3196 transfers made in the District, 259 were made by moneylenders, 661 by agriculturists and 2276 by others; while 1746 were made to moneylenders, 438 to agriculturists and 1012 to others. These figures will

not appear surprising when the character of the seasons following the introduction of the settlement is considered. These seasons brought the District an unparalleled series of misfortunes. The average harvest of the years 1893-94 to 1902-03 was only 63 per cent. of the normal. During the seven years ending with 1900, the people of the Central Provinces lost produce to the value of 40 crores of rupees. 'The effect of the losses and failures which have been 'entirely caused by unfortunate climatic conditions cannot 'well be exaggerated,' wrote the Hon'ble the Chief Commissioner in 1901. Rents fell into arrears, land fell out of cultivation, seed became scarce and debts accumulated, and mālguzārs whose incomes were reduced by the revision of settlement had to bear further reduction in the short collections and diminished outturn of their home farms. As an indication of the manner in which rental collections were effected it may be mentioned that during the course of settlement to the year 1904-05 only 74 per cent. of the demand was collected in the Court of Wards estates in this District. The mālguzār frequently had to borrow money to pay his revenue and his household and other expenses, and the price of proprietary interests in land sank to a very low level. It is not to be wondered at that smarting under the losses of the seasons the mālguzārs threw the blame indiscriminately on the Government; although it is clear that the settlement had not been given a fair chance. The schemes of abatement and revision which were necessitated by the successive failures of crop have been described in the chapter dealing with Land Revenue.

In the Murwāra tahsil the conversion of rents in kind (*bhāg*) to cash rents at the last settlement is said to have seriously affected the condition of mālguzārs. Although transfers of proprietary right were formerly notoriously few in this tahsil the condition of mālguzārs is now not nearly so satisfactory as that of tenants and transfers of proprietary right have been numerous since settlement. Between 1891-92 and 1904-05 a total of 215 whole villages have changed hands in this tahsil. Thākur Hanumān Singh of Barwāra, a large landlord owning 54 villages, has reverted to the *bhāg* system very extensively and has now taken to leasing the right to collect his *bhāg* rents to speculative middlemen. Generally

speaking the condition of the mālguzār who favours the *bhāg* system is better than that of the mālguzār who abides by his cash rents and the broad inference may be drawn that his income is greater.

The bumper harvest of 1903-04 marked a revival in the pecuniary value of landed property and, if seasons continue good, there is no reason for apprehension as to the future of the mālguzārs of the District. In many cases grave indebtedness has been caused as much by extravagance and unbusinesslike habits as by the losses due to bad seasons. Examples are not wanting of proprietors who, despite the comparative smallness of their resources, have succeeded in making good progress since settlement. There are, too, instances in which proprietors holding revenue-free or on *ubāri* tenure have contrived to accumulate a load of debt such as to endanger their solvency and their estates. A remarkable feature of the statistics dealing with the transfers of landed property is the extent to which the moneylending classes have continued to progress in their position as landlords. It is not improbable that this progress may give rise to problems of serious importance in the future.

Caste and character.

163. As among the population generally so among the landholding classes Brāhmans and Gonds occupy the leading place. Between them they held 1283 villages out of a total of 2707 at the 30 years' settlement. At present they hold altogether 1203 villages (Brāhmans 796 and Gonds 407) out of a total of 2533. Then come the Kurmīs, Rājputs, Lodhis, Kāyasths and Baniās who held between them 784 villages at the 30 years' settlement and now hold 1055 villages, *viz.*, Kurmis 228, Rājputs 201, Lodhis 112, Kāyasths 103, and Baniās 411. The other landholding castes are Muhammadans owning 81, Gosains 30, Kalārs 30, and Ahirs 33 villages. The most prominent of the old feudal families are Lodhis and Gonds. Their estates principally lie in the western portion of the District on the Damoh boundary and in the eastern portion on the Mandlā and Rewah borders. The leading Lodhi families are found in Salaiyā, Indrāna, Katrā Belkherā, Mātanpur Belkherā, and Piparia; and the leading Rāj-Gond families are at Imlai, Sundarpur, Bhandrā, Bhatgawān, Barwāra and Ruhania. The representative of the Bhatgawān

family, Mahipāl Singh, became a rebel during the Mutiny of 1857, and lost many of his villages in consequence; the family now own only thirteen villages. The north-western portion of the Murwāra tahsīl, lying on the Pannā borders, was once the stronghold of some Rāj-Gond families, but during the currency of the last two settlements it became a happy hunting ground for the Baniās of Bilahrī and Murwāra who dispossessed the old families of a number of villages and reduced them to a state of poverty. In the centre of the District the mālguzārs are generally Kurmis, Brāhmans and Baniās. At the last settlement in the tract known as 'Pachel' lying in the Sihorā tahsīl 54 per cent. of the mālguzārs were Brāhmans. In the Jubbulpore and Sihorā tahsīls as a rule the Kurmī mālguzārs are in comfortable circumstances. An Ahir family at Kaimori holds 13 villages. Of these 11 are held as a jāgir, revenue-free for services rendered during the Mutiny; and the rest are held in ordinary mālguzāri right. The Beohārs, a respectable family of Kāyasths, were Sadar Kānungos during the Marāthā rule. The family hold 10 villages of which 8 are held on quit rent. Kāyasth proprietors are generally descendants of pargana officials of the native government, who from their position on the *Sūbah's* establishment possessed great opportunities for acquiring landed property. Some of the Baniā and Mārwāri proprietors held villages even at the 30 years' settlement, while others have since been acquired by purchase, mortgage or foreclosure. Of the villages held by these proprietors 158 mostly in the Jubbulpore tahsīl are in the hands of the firm of Rājā Gokuldās. The mālguzārs have roughly been classified into two types, the *mahājan* or commercial type and the ordinary cultivating type. The aim of the latter is to expand their own home farms by dispossessing tenants of their land either by inducing them to give up fields on promise of making a reduction in their rents or by ejecting them on account of arrears of rent. The *mahājans* on the other hand are always aiming at making rent enhancement; so much so that the whole produce of a tenant's field often comes into their hands in lieu of seed grain advanced to him, interest on the advance, and rent. Whenever a holding is surrendered by a tenant, the *mahājan* mālguzār gives it to another tenant on enhanced rent while the cultivating mālguzār annexes it to his home farm. It is

only fair to say, however, that a large number of mālguzārs belong to neither of these extreme types.

164. The policy which protected and established the patels at the twenty years' settlement paid no regard to the humbler cultivator. So long as short settlements for three or four years were made and patels were constantly ousted, the cultivator enjoyed by custom, though not by law, a greater fixity than the patel. But directly the tenants of the zamindāri school were inculcated and enforced at the twenty years' settlement landlordism raised its head, and so far as the demand for land permitted, the patels exercised an increased authority over the ryots. At the thirty years' settlement recognition of rights of cultivators against the farmer of the village was so far conceded that protection was accorded to the oldest cultivators. Leaving aside the *mālik-makbūza* class whose status became that of proprietors, the most privileged class of tenants were those endowed with the so-called absolute occupancy tenure, the principal incidents of which were heritability, transferability, subject to pre-emption on the part of the landlord, and fixity of rent for the term of settlement. The other privileged class was that of occupancy tenants, who were entitled to hold at a rent to be fixed not by the landlord but by a Revenue Officer; their tenure was heritable by direct succession but not transferable save with the landlord's consent.

Tenants.

The rest of the tenants—ordinary tenants—remained tenants at will, a position of which the landlord took full advantage, being aided thereto by the immense expansion of agricultural profits which the opening of the railway and the rise in prices brought in their wake. So firmly established became the superiority of the landlord over the tenant in this District, that subsequent protective legislation (Act IX of 1883) was very slow to influence the relation between them. Legally an ordinary tenant, whether holding on a lease or not, could not be ejected save for failure to pay his rent or on the ground that his holding consisted entirely of the landlord's demesne (*sīr*) land. Practically he was in the past ejected at his landlord's will, and indeed estates were not uncommon on which the ordinary tenants were regularly shifted. Legally his rent could only be enhanced by formal agreement through

the civil court, and his refusal to accept an enhancement only enabled the landlord to eject on payment of compensation equal to seven times the amount of enhancement claimed. In reality his rent was enhanced pretty much according to the landlord's greed or necessity.

One of the features of the last settlement effected during the years 1886 to 1894 was the attempt made to protect this large class of ordinary tenants. It was then found that in the poorer parts of the District, where competition was weak and tenants, being mostly Gonds, would resent any oppression by absconding, the rents of unprotected tenants were moderate. But in the rest of the District the demand for land caused by the boom in the wheat trade had produced a very different state of things; wheat producing land was commonly auctioned to the highest bidder; tenants were shifted about from holding to holding to prevent the accrual of occupancy rights, and landlords vied with each other in the exorbitance of their demands. Farming had become a commercial speculation. In 13 groups which contribute half the revenue of the District the rent of ordinary tenants had been enhanced by mālguzārs themselves by amounts which distributed in the form of an acreage rate represented increases of from 49 to 104 per cent. over the figures of the 30 years' settlement. In individual villages mālguzārs had enhanced rents by 226 and 452 per cent. The competition which arose in the Haveli spread into the tracts which border it and a considerable area was cultivated by tenants from outside villages who took it practically on auction terms. At the time that the settlement operations were carried on the law gave no power to the Settlement Officers to reduce ordinary rents. But it was realized that some attempt at reduction of the most excessive demands on individual tenants was advisable. The mālguzārs were offered the option of accepting a reduction of rent or being fully assessed on the total rental as recorded. There was a good deal of opposition on the part of landlords of the banker class (who unfortunately in this matter set a fashion to many others), who considered the step an unwarranted interference with the sanctity of contract, since the law provided that the rent of an ordinary tenant should be settled by contract between himself and his landlord. Some success was however achieved and the

policy had a great moral effect in impressing upon the tenantry that they were not absolutely at the mercy of the landlords and upon the landlords that rack-renting was a suicidal policy. The procedure was the forerunner of the change made in the law by Act XI of 1898, under which the Settlement Officer is now given power to reduce the rent of an ordinary tenant if he is satisfied that it is excessive.

The revised rents introduced at the settlement had no sooner come into force than the series of bad seasons commenced. There was already considerable inequality among the rents of ordinary tenants, as some landlords had allowed the Settlement Officer to reduce rents and others had not. The schemes of abatement and revision, which followed the successive failure of crops, still further accentuated these differences. The villages selected for the concessions were determined by an arbitrary test. Under the abatement scheme rents were reduced where cultivation had fallen off and then the revenue was reduced in consequence; under the revision scheme the revenue was reduced on the ground that the enhancement was excessive and rents were then reduced in some similar proportion. The result of all these changes was that the rents became inapplicable to existing circumstances or, in fact, obsolete. The correction of this inequality of rents, which is felt to be prejudicial to the recovery of the District, is one of the main objects of the settlement now being carried out by Mr. Crosthwaite whose task it is to fix rents on some 480,000 acres held by privileged tenants and on some 580,000 acres held by ordinary tenants.

Caste and condition of tenants.

165. The principal castes of tenants in the Jubbulpore and Sihorā Havelis are the Kurmīs, Lodhis, Brāhmans and Rājputs. These are good cultivators; many of them have large holdings and most possess a good stock of agricultural implements. Kurmīs and Lodhis cultivate with their own hands but Brāhmans as a rule carry on their cultivation through farm-servants (*halwāhas*). 'In the Murwāra tahsil', writes Mr. Crosthwaite, 'there is a preponder-'ance of Brāhman tenants. The Brāhman is prevented by 'caste from performing field labour and though Brāhman 'tenants can be found who admit to doing a little weeding 'on occasion they have generally speaking to carry on the

'whole of the operations of agriculture by means of hired 'servants. This caste disability is allowed for under the '*bhāg* system and a smaller share of the produce is exacted 'from Brāhmans than from tenants of lower castes. The 'Brāhman's ploughman is generally a Gond or a Kol and he 'frequently cultivates a portion of his master's land in lieu of 'wages. He cultivates his own land fairly well and that of 'his master very indifferently. It is not uncommon to find 'that the holding of a Brāhman is producing a crop which is 'much inferior to that growing on the field of a Teli or a 'Kurmī close at hand. The members of a Brāhman family 'increase and multiply though the holding grows no larger 'and the consequence is that the condition of Brāhman ten-'ants with small holdings is poor. But the problem of ex-'cessive pressure on the soil has not yet arisen in the Mur-'wāra tahsīl and the Brāhman tenant has usually more than 'enough land for the requirements of his family and less than 'he would like to have to sublet habitually. The condition 'of the Brāhman tenantry in the Murwāra tahsīl is good; as 'a class they are free from debt and enjoy many privileges 'which have long ago been withdrawn from them in other 'parts of India. The tenantry in the Murwāra tahsīl may be 'placed in two divisions 'cash' and '*bhāg*.' *Bhāg* tenants 'are generally deep in the debt of the mālguzār. The most 'remarkable features of the cash tenantry are their general 'freedom from debt and their anxiety to avoid debt. Besides 'Brāhmans the castes most commonly found in the Murwāra 'tahsīl are Kurmīs, Ahirs, Lodhis and Telis. These castes 'are all wonderfully free from debt; they own large number 'of cattle and live comfortably.' A feature of the Murwāra tahsīl is the annual exodus of thousands of tenants whose stake is confined to holdings of the poorer soil only producing such *kharīf* crops as kodon and til and to the possession of huts in, or frequently outside, the villages where they were born. As January approaches gangs of these labourers wend their way to the south of the Province and there earn high wages on the manganese fields or on railways or other works. With June they return bringing a great deal of money. In years of ample rainfall the period from June to January is spent under conditions which admit of lavish expenditure on feasts and intoxicating liquor. The *pataruā* or

bhatuā holding is ploughed in a more or less perfunctory manner and in most years the crop of kodon or til is wholly out of proportion to the small amount of labour and capital expended. The cash savings evaporate, the crop is reaped; the men stay until they have completed the *rabi* sowings of Brāhman and other tenants and until necessity drives them south again with some grain and a few scanty belongings. They leave the Jubbulpore District not because there is no work to be found but because they know that constant employment and higher wages await them elsewhere. *Ghī* is exported in large and increasing quantities from the Murwāra tahsīl and the stability which the tenantry of the tahsil have shown during years of stress can, in Mr. Crosthwaite's opinion, be attributed largely to the fact that most tenants possess a valuable asset in a substantial number of milch kine. Omitting the Gonds the tenantry of the District live with ease according to their means and standard of comfort. They are sufficiently clothed, have strongly built tiled houses and spend money on marriages. A number of them sow their own seed while a great many substantial cultivators sow their own seed in part but borrow some from their mālguzārs merely to keep up their connection so that in time of need they may have a *mahājan* ready at hand to assist them. The tenants inhabiting the eastern portion of the District are mostly Gonds who are generally in very poor circumstances. They have small holdings and sow millets such as kodon or kutkī which is their staple food. They are as a rule insufficiently supplied with agricultural implements and their ploughing is generally effected with hired bullocks. Most of them pay rents at a certain rate per plough or by the division of the produce termed *bhāg* as in the Murwāra tahsil. The commutation of these *bhāg* rents into cash rents was one of the most important of the operations included in the last settlement. The Gonds flock with their families at the spring harvest time to the wheat fields of the Haveli to eke out their subsistence by working as labourers and their earnings give them food until the commencement of the rainy season. The Gond lives partly by cultivation but mostly on wages. He is generally free from debt because he has no credit.

With regard to the economic condition of the tenantry as a whole there is no doubt that the series of bad years which

succeeded the settlement had a very depressing effect. The export trade of the District upon which the prosperity of the tenants largely depends, sank considerably. The demand for and the value of land decreased and the credit of the tenantry diminished. The cultivated and cropped areas of 1899-00 represent the very low level of prosperity to which the District had been reduced by a sequence of bad seasons. But fortunately the tale of the seasons since the culminating disaster of 1899-00 has been a happier one and with a reviving trade the District has succeeded in making a remarkable recovery. Land which in 1899-00 was selling for prices equivalent to only four times the annual rent is now sold at not less than 10 and sometimes even as high as 20 times. The number of plough and other cattle possessed by the average tenant now exceeds the recorded average of settlement; and that the energy and power of resistance of the people have not been permanently crushed by calamity is evidenced by the fact that the desire to improve the land is now greater than ever it was. It seems probable that there is much truth in the dictum of a leading mālguzār who remarked that the famine had resulted not only in an improvement in the roads but in the industry and good sense of the people of the District. It has been left on record by Mr. Charles Fraser that in the early days of British rule in this District but few tenants were found in the Sihorā Haveli who sowed their own seed or even reaped their own harvest. The indebtedness of the tenantry of 1825 was extraordinarily heavy. At the present date tenants in the Haveli of the District are seldom indebted to a greater extent than their resources warrant. It is, of course, true that the load of indebtedness which they carry is a serious bar to their further economic progress. It is also true that this same load of indebtedness is likely to raise a situation of great difficulty should the future bring a further succession of bad harvests with it. In an average Haveli village it is not uncommon to find an average debt of Rs. 100 for each tenant. Such an average necessitates very heavy debts in individual cases. In villages owned by moneylenders tenants are in a condition of hopeless insolvency. In such villages debts have accumulated to amounts which can never be realized and the system of accounts altogether obscures the payments made. For

instance, supposing a tenant to owe Rs. 100 it will be absolutely impossible to ascertain what amount is due on account of rental arrears, on account of principal lent for such purposes as marriage expenses, and for interest. The condition of villages held by Kurmī and other mālguzārs furnishes a most striking contrast to villages in which commercial management has conduced to the above state of affairs. In the most fertile portions of the wheat plain it is possible to collate figures for an equal number of villages held by commercial and other mālguzārs respectively. The figures for the villages held by the former will set forth heavy rental arrears and enormous debts,—a condition of affairs which is strangely out of accord with the undoubted prosperity of the tenantry and their ability to find large sums for ceremonial expenditure. The figures for villages held by the latter will shew that rental arrears and debts are extremely light. When resources are equal and other things are equal, the conclusion that we are free to make is that the cause of these different effects is the method of management adopted. It is the aim of every commercial landlord to reduce his tenants to the condition of human investments from which he can obtain as high a rate of interest on his capital as possible, whereas the resident mālguzār, lacking similar business instincts, is content to consider his tenant in a spirit at once more generous and more conducive to mutual prosperity. There cannot be the least doubt that if mālguzārs of the commercial class were to squeeze their tenantry to the full extent to which their legal claims would entitle them the condition of their victims would be miserable indeed. A human investment, however, does not repay unduly harsh treatment and this mālguzārs well understand.

Material condition of the people.

166. The period from 1860 to 1890 was one of marked progress. The easy terms of the thirty years' settlement, coupled with economic developments brought about by the opening up of the Central Provinces generally, enabled agriculturists and labourers to improve and develop their resources and a noticeable advance in the style of living was the result. The shadow of debt hung over the lives of the thriftless but there were no signs of anything approaching general insolvency. The general prosperity induced the

agricultural classes to spend on marriages and similar ceremonies sums strikingly out of proportion to the rents they paid. They built more substantial houses, ate better food, wore finer clothes and increased their store of gold and silver ornaments. Even ordinary tenants kept horses or ponies and tilled and harvested their holdings with the aid of hired labour. The non-agricultural classes participated in the general prosperity; and there was a visible rise in the standard of comfort of the educated classes.

The series of bad and indifferent years that mark the decade from 1892 to 1902 arrested the steady progress of the preceding period very materially, particularly among the rural population. The standard of living deteriorated ; kodon and gram were once more resorted to as food-stuffs instead of rice and wheat; houses were not kept in good repair ; coarser clothes were again worn and the burden of debt gradually became overwhelming. In order to keep distress at bay cultivators pawned or sold their jewellery and disposed of their horses, ponies and other cattle.

The last five years have witnessed a return of better seasons and the people, though they have not yet regained the pre-famine level of prosperity, are once more well-to-do. The standard of living has become generally high, especially in towns where people now build better, well-ventilated and more commodious and expensive houses than formerly. In the Jubbulpore city the water rate and the latrine cess based on the letting value of houses have substantially increased and the receipts from octroi on building materials have increased from Rs. 4875 in 1901-02 to Rs. 6699 in 1905-06. The average consumption per head of *gur* has steadily declined from 11 seers and 9 chittacks in 1896 to 9 seers and 7 chittacks in 1901-02 and 6 seers and 10 chittacks in 1905-06, while the consumption of metals is from two to three times what it used to be and that of sugar has approximately trebled. In the interior the houses of the poorer tenants and labourers are still made of mud or unburnt bricks or of stone where it can be had cheaply and in large quantities as in parts of the Murwāra tahsil; the roofs are tiled. These houses are usually rectangular in shape and generally consist of 3 small blocks at right angles to one another with a yard in the centre. One of the blocks is used as a kitchen, the other as a store room

and sleeping room and the third as a cattle shed ; the blocks are seldom partitioned. A structure of this kind costs from Rs. 20 to 40. The houses of mālguzārs and well-to-do tenants are generally made of bricks and have separate rooms set apart for different purposes. They cost from Rs. 350 to 1,000. Thatched roofs and bamboo walls are found only in a few remote villages on the borders of the jungle inhabited almost exclusively by people of aboriginal descent. The food of the agricultural classes has not materially changed but more sugar and less *gur* is now consumed by them. Some advance has been made in respect of clothing, broad cloth or tweed jackets, imported blankets, rugs and wraps being occasionally met with. The food of a mālguzār or substantial tenant will cost from Rs. 20 to Rs. 25 a month for a family of four ; the cost of clothing varies from Rs. 7 a year in the case of a small cultivator to Rs. 50 in that of a large cultivator or mālguzār. Children under 7 years of age usually go naked except in the cold weather. The wives of poorer cultivators and labourers wear pewter ornaments and glass beads of about Rs. 5 in value. The wives of substantial tenants and mālguzārs generally have silver ornaments which cost from about Rs. 100 to Rs. 250. The higher classes wear gold above the waist and silver below. Ornaments are usually given at the time of marriage. A clerk living in a town on a salary of Rs 40 a month spends from Rs. 60 to Rs. 75 annually on clothes ; he pays Rs. 3 to Rs. 5 a month as house rent and as much more for the services of a barber, washerman, water bearer and sweeper. His food costs him about Rs. 25 a month. The well-to-do classes wear clothes of fine texture, smoke cigarettes and use furniture of a European pattern. They have chairs, tables, lamps with glass chimneys, china or enamelled cups and plates and usually possess a clock. Owing to its cheapness and neat appearance enamelled ware has found great favour with poorer Muhammadans and Hindus and is frequently found in the possession of menial servants getting about Rs. 6 a month. A European style of dress is becoming common among men of the educated classes ; they often keep their own razors and shave their faces but allow their hair to grow. Tea is now very largely drunk. It is making its way even into the interior and can be obtained from a petty grocer in a village bazar. During

the last few years 5 small tea shops have been opened in Jubbulpore and are said to be doing a fairly good business. Soda and ice are commonly consumed and a couple of enterprising hawkers ply a profitable trade in the city in selling ice-cream during the summer months. Watches and cycles are much in evidence, matches are very habitually used by the people and kerosene oil is found in the houses even of the most humble.

PRICES.

Course of prices. Wheat.

167. The staple food grain of the District is wheat which was selling at 44 seers (90 lbs.) for a rupee in 1845-46, 60 seers (123 lbs.) in 1848-49 and 42 seers (86 lbs.) in 1854-55. In his Settlement Report of 1896 Khān Bahādur Aulād Husain states that from his own personal experience he can say that a Nāgpuri rupee equivalent to 13½ annas bought 60 seers of wheat flour in 1854. During the quinquennium ending 1860 the rate varied between 78 and 116 lbs. and averaged 94 lbs. per rupee, while the price of this food grain during the five-yearly period preceding the settlement of 1867 was 106 lbs. on an average (1858-59 to 1862-63). The famine of 1861 in the Upper Doab of the Province of Agra and the neighbouring Districts of the Punjab and Rājputāna and the scarcity of Cutch combined with the American War raised the price to 46 lbs. in 1863. On the collapse of the inflation caused by the American War prices would have fallen but for the great famine of 1866 in Orissa which sent the price up to 26 lbs. while the famine of 1869 affecting Western Rājputāna and parts of Northern India was responsible for a still higher figure of 22 lbs. in that year. In 1867 the railway came to Jubbulpore from the Allahābād side and three years later Jubbulpore was connected with Bombay by the Great Indian Peninsula Railway. With the opening of the railway which marks the commencement of export trade (the Suez Canal having also been opened in 1870) prices were still further stimulated and ranged between 54 and 39½ lbs. for the period 1871-77. The famines of 1878 and 1879 in the North-Western Provinces and Madras sent up the figure again to 23 lbs. After this prices fell slightly until 1886 when the development of the export trade again brought about a rise which continued until after 1901. During the

five years immediately preceding the last settlement (1886-90) the average price recorded is 32 lbs. indicating a rise of 239 per cent. on the price of the quinquennial average preceding the old settlement (1858-59 to 1862-63). At the last settlement (1896) wheat was 23½ lbs. and excepting in the famine years of 1897 and 1900 when it was 19 and 21 lbs. respectively it varied between 30½ lbs. in 1904 and 25½ lbs. in 1901 during the decade ending 1906, the average for the decade working out to 28 lbs. The rate in 1907 was 27½ lbs.

Rice.

168. The other principal staple crop is rice which covered 15 per cent. of the cultivated area of the District at the last settlement (1896). It sold at 50 lbs to the rupee in 1845, 60 lbs. in 1849 and 1854, 62 lbs. in 1858 and 40 lbs. in 1862. In the next two years it declined to 39 and 21 lbs. respectively. The average for the 20 years ending 1864 came to 51 lbs. for a rupee, the price being highest in 1864 and lowest in 1858-59. These are average prices for the District. From 1865 onwards quotations are taken from the 'Prices and Wages Volume' which gives the rates as they ruled at the headquarters of the District. During the quinquennium closing with 1870 the price reached its highest point, varying between 18 and 20 lbs. and averaging only 20 lbs., a figure which during the following two decades was approached only in 1878, 1886, 1883 and 1889 when the rates respectively were 20, 25, 22 and 20 lbs. The effect of the railway communication and the development of the export trade to Europe has been to raise prices permanently to the limits to which they were temporarily forced up by such causes as the American War, famine and scarcity. During 1891-95 the average rate was 28 lbs. to the rupee. In recent years the rate shows a fluctuation from 18 lbs. (the famine rate of 1897) to 31 lbs. in 1898, the price during the six years ending with 1906 having never risen beyond 26 lbs. (the rate of 1904) and oscillating round 22 lbs. In 1907 it was 20 lbs.

Kodon.

169. Kodon is the staple food of the aboriginal population and occupied at Mr. Aulād Husain's settlement of 1896 15 per cent. of the cultivated area of the District. During the 17 years from 1845 to 1861 the price fluctuated from 190 lbs. in 1851 (the cheapest year) to 114 lbs. in 1856 (dearest) and averaged 137 lbs.

During the next three years there was a sudden rise in price from 100 lbs. in 1862 and 85 lbs. in 1863 to 45 lbs. in 1864. The average for 20 years closing with 1864 came to 128 lbs. These are the average prices for the District. From 1865 onwards the prices have not been recorded but in recent years the usual price of cleaned kodon has been 13 seers a rupee.

Gram.

170. Gram was 110 lbs. for a rupee in 1845, 145 lbs. in 1848, 175 lbs. and 185 lbs. (over $2\frac{1}{2}$ maunds) in 1850 and 1851 respectively. The rate of 1851 has never since been approached. During 1852-56 it rose in price from 170 lbs. in 1852 to 75 lbs. in 1855 while in the following five years it varied between 133 and 108 lbs. In 1862 it went as high as 82 lbs. and in 1863 and 1864 it rose further still when 49 and 48 lbs. are the recorded prices. The average rate for the 20 years from 1845 to 1864 comes to 110 lbs. or exactly the rate of 1845. During the next 25 years (1866-1890) gram ranged between 72 lbs. in 1876 and 36 lbs. in 1889 excluding 1866, 1869, 1870, 1878 and 1879 when the rates respectively were 26, 26, 30, 24 and 26 lbs. During the following quinquennium it sold at an average of 37 lbs. for a rupee. During the decade 1896-1905 the price ranged between 27 lbs. in 1901 and 45 lbs. in 1904 excluding the famine rates of 20 and $20\frac{1}{2}$ lbs. in 1897 and 1900 respectively. In 1906 it was 27 lbs. and in 1907, 29 lbs.

Linseed.

171. Linseed was 72 lbs. in 1845 and fluctuated between 77 and 60 lbs. during the quinquennium closing with 1849. The price fell during the next three years and we find it selling as cheaply as 105 lbs. (1850) for a rupee. This was however not maintained and in 1853 it was sold at 52 lbs. or less than half the rate obtaining only three years before. The rate of 1853 remained practically stationary, varying between 56 and 48 lbs. during the period 1853-61. In 1862 it was 45 lbs. only and in 1864 31 lbs. The average for the 20 years ending with 1864 was 60 lbs. During 1869-74 the price experienced a further rise when on an average only 24 lbs. are recorded, the highest figure being reached with 18 lbs. in 1872. The rate during 1875-1887 ranged between 32 and 24 lbs. excluding the abnormal prices in 1877 and 1878, the rates in these

years respectively being 16 and 20 lbs. The price rose again to 20 lbs. in 1888, a figure which was maintained during the next three years. By 1901 the price had risen further still and we find 13 lbs. recorded for that and the following year. In 1904 it was 23 lbs. but fell again to 18 lbs. in 1905. In 1906 and 1907 the rate rose again and was 16½ lbs.

Statistics of prices.

172. A statement of prices of the Jubbulpore District arranged in quinquennial periods from 1846 to 1905 is given below;—

In pounds per rupee.

Period.	Wheat.	Rice.	Kodon.	Gram.	Linseed.
1846-50	98	55½	132	127	76
1851-55	82	53½	147	121	68
1856-60	94	55	131	114	52
1861-65	52	30	94	56	42
1866-70	37	20	Not available	33	26
1871-75	50	31		54	24
1876-80	44	29		43	24
1881-85	54	32		59	27
1886-90	48	24		41	22
1891-95	36	28		37	17
1896-1900	33	25		30	18
1901-1905	29	23½		36	17

During these 60 years it is apparent that prices gradually rose until the climax was reached in 1866-70, the price of wheat being then 138 per cent., rice 177 per cent. and gram 285 per cent. higher than in the first period 1846-1850. The ensuing 25 years constitute a period of more or less steady prices. The famines of 1897 and 1900 again caused a return to abnormal prices, which became even higher than the average for the abnormal period 1866-70. Wheat was 12 per cent. higher in 1895-1900 and gram 10 per cent. higher than in 1866-70, only rice selling a little cheaper. Owing to poor harvests in the last quinquennium (1901-05), the effects of the famines of 1897 and 1900 and the famines in Chhattisgarh, the prices of wheat and rice were even higher than in the previous period.

Miscellaneous articles.

173. For the fourteen years (1861-74), prior to the abolition of the Salt customs line in 1874, salt sold at between 8½ and 17 lbs. The duty of Rs. 3 per maund was in 1878 reduced to Rs. 2-8

and in 1882 further reduced to Rs. 2. In 1888 it was again raised to Rs. 2-8. The price of salt accordingly fluctuated, the average for 1875-78 being 16 lbs. for 1878-1882, 18 lbs., and for the period 1883-1887, 22 lbs. The raising of the duty in 1888 had the immediate effect of raising the price and we find the average during the following 15 years (1888-1902) at 19 lbs. only. In 1903 the duty was lowered to Rs. 2, in 1905 to R. 1-8 and in 1907 to R. 1, resulting in a corresponding reduction in the price of the article which was 22 lbs. in 1903, 25 lbs. in 1905 and 32 lbs. in 1907. In 1908 it was 34 lbs. in Jubbulpore and 32 lbs. in Murwāra and Sihorā. Till recently foreign sugar was generally used but the article manufactured in Northern India is now coming into favour. The foreign sugar imported from Bombay is sold at the rate of 4 to 5 seers a rupee, while the rate of Mirzāpuri sugar is 2¾ seers a rupee. *Gur* or unrefined sugar from Northern India is sold at 12 to 14 lbs. and that produced in Jubbulpore at 10 to 12 lbs. a rupee. *Ghī* is sold at 11 chittācks a rupee. Milk is sold at Jubbulpore and one or two large villages and its price varies from 16 to 12 lbs. a rupee according to the time of the year, being most expensive in the hot weather. Grass can be had at a rate varying from 1000 to 1500 bundles a rupee and *karbī* or juār stalks fetches from Rs. 28 to Rs. 35 per 1000 bundles. Cotton seed sells at Rs. 2 per maund of 400 seers and 17 seers of oilcake cost a rupee. The price of fuel has risen largely. A cartload of fuel weighing about 3 maunds fetches Rs. 2-4 in Jubbulpore city and from R. 1 to Rs. 2 in the interior of the District. A headload of fuel is sold at the rate of 2 to 4 annas.

WAGES.

Urban and factory wages.

174. According to the official returns the wages of an able bodied labourer between 1873 and 1905 varied from Rs. 3-8 to Rs. 5 a month. In 1906 a labourer received Rs. 6 a month. The wages of skilled artisans such as masons, carpenters and blacksmiths between 1873 and 1905 ranged from Rs. 10 to Rs. 16 a month. In 1905 there was a sudden rise to Rs. 17-8 and the same figure prevailed in 1906. The last few years have undoubtedly witnessed a most marked increase in the general rates of remuneration

both of skilled and unskilled labour though the increase is perhaps not so marked as in Nāgpur. Causes contributing to this result are the development of factories, the construction of new railways, the largely increased amounts spent by Government on public works such as roads, buildings and irrigation tanks and lastly the partial depletion of the working population by the ravages of plague and famine. The wages paid in the Jubbulpore factories in 1907 are as follows. The Gun Carriage factory pays the highest rates on account of the higher standard of work required. There the monthly pay of a blacksmith is Rs. 27, of a fitter Rs. 27, of a carpenter Rs. 17, of a bricklayer Rs. 18, of an engine driver Rs. 20 and of a boilerman Rs. 14; an ordinary coolie gets Rs. 7-8 and a messenger Rs. 8 a month. In the cotton mills the monthly pay of a blacksmith is Rs. 18, of a fitter Rs. 24, of a carpenter Rs. 16, of an engine driver Rs. 30, of a boilerman Rs. 13, of a mason Rs. 17, of a weaver (men) Rs. 17, of a spinner (boy) Rs. 8, and of a dyer Rs. 11. Male coolies get 4 annas and females 3 annas a day; messengers get Rs. 6 a month. In the Pottery Works the monthly pay of a blacksmith is Rs. 11, of a fitter Rs. 22, of a brick-layer Rs. 15, of an engine driver Rs. 9, of a boilerman Rs. 8, of a pipe-polisher Rs. 10, of a tile maker Rs. 8-8, of a brick moulder Rs. 8, of a fitter Rs. 13, of a kilner Rs. 17. Male coolies are paid Rs. 6 and females Rs. 3-8 a month; messengers get Rs. 8 a month. For casual labour in the large towns a male coolie will ask for five or six annas a day, and a female for three or four annas. The rates are slightly lower in the interior of the District.

Farm-servants.

175. The farm-servant is known locally as *harwāha*. He is engaged by the year or for six months or three months, the contract being made either in the beginning or in the middle of the month of Jeth (May-June). Farm-servants who are engaged by the year are locally called *barsondhī*, those for six months *chhamāhi* and those for three months *timāhi*. The rate and description of wages vary in different parts of the District. In the Murwāra tahsil the usual agreement is to pay a monthly wage either of Rs. 3 in cash or one *khandī* of kodon in kind. If the grain given is wheat, the quan-

tity is reduced to half a *khandī*. In addition to this a farm-servant receives one *khandī* of grain for every ten *khandīs* of the outturn at the time of threshing. In the Haveli tract of the Sihorā tahsīl the monthly wage is Rs. 2-8-0 in cash and about 10 *kuros* of wheat or gram at the threshing time. In the Majholi circle of that tahsīl a *barsondhī* is paid 13 *kuros* of wheat or gram monthly and another 40 *kuros* (or 2 *khandīs*) at the time of threshing. In the Jubbulpore tahsīl in villages near the railway wages in cash are paid at the rate of Rs. 4 a month but in hilly villages the rate is Rs. 3 a month. Formerly the farm-servants were always paid in kind but in recent years, owing to the fluctuations in the price of grain, the custom has been introduced of paying cash wages.

While the *rabi* sowing is proceeding the farm-servant receives every alternate day one *barhaiyā* (1¾ seers) of grain during the period he is employed on sowing. This is called *chabenā* in the Murwāra and Sihorā tahsīls and *pashī* in the Jubbulpore tahsīl. The grain is either boiled and eaten in the field or taken away by the labourer's wife. During the *kharīf* harvest the farm-servant receives a head-load of *dhān* or kodon yielding about 4 *kuros* of grain. In the Murwāra and Sihorā tahsīls he has the privilege of making this head-load for himself, and he makes it as heavy as he can, but the farm-servant of the Jubbulpore tahsīl does not enjoy this privilege. At the time of cutting the *rabi* crop he receives two head-loads of sheaves yielding about 4 *kuros* of grain. The larger head-load is called *bojhā* in all parts of the District but the smaller one is locally called *jenthā* in the Murwāra tahsīl, *karpā* in the Sihorā tahsīl and *pūri* in the Jubbulpore tahsīl.

The mode of gleaning also varies in different parts of the District. In the Murwāra tahsil if the field is thickly strewn with *sīla* (ears) the owner gets it gleaned. After this the gleaning is done by the farm-servant. In the Sihorā and Jubbulpore tahsīls a farm-servant has the exclusive right to all *sīlas* fallen on so much portion of the field as was sown by 5 *khandīs* of seed. A blanket or a pair of shoes do not form part of the perquisites of an ordinary farm-servant in the Murwāra tahsīl but

one who elects to graze his master's bullocks in the morning and the evening after the field work is over receives these presents. In the Sihorā and Jubbulpore tahsils a *barsondhī* receives these perquisites as a matter of course and the farm-servant has no right to refuse any odd work he is told to do. Two waist-coats, one stuffed with cotton for the cold season and the other of plain cotton, are also annually given to the farm-servant of the Sihorā and Jubbulpore tahsīls. The average of the different rates works out to something more than Rs. 4 a month. The farm-servant is said also to supplement his income by living at his master's expense while watching the ripe crops or b appropriating a little of the produce in the threshing floor at the night time.

The farm-servants are generally recruited from the castes of Kol, Bharia, Korī, Chamār and Gond. Bharias are considered the best: next to them come the Kols and the Gonds. In the Sihorā tahsil Lodhīs also are said to make good farm-servants.

Herdsmen.

176. The herdsman is called *baredī* or *charwāha*. Persons having a large number of cattle employ a private herdsman and large landowners have three or four, one for each class of animal. In the busy season each tenant has a private grazier for the agricultural bullocks but during the slack season the bullocks are put in charge of the village herdsman. In villages where the latter has to manage a large herd of cattle he employs two or three boys as his assistants. The monthly rate of pay of a private grazier is one *khandī* of kodon for a full-grown man and half a *khandī* for a boy. In addition to this wage he receives a blanket and a pair of shoes. In the Jubbulpore tahsil he is given daily 2 cakes of bread made of one *pao* of flour and a rupee in cash each month. The usual charges of the regular village grazier are 1 anna for a cow or a bullock and 2 annas for a buffalo per month. On the birth of a calf he receives also an old *dhotī*. Two annas for a buffalo and 1 anna for a cow are extra payments made to him for milking the animal daily, morning and evening, at the house of the owner. The herdsman is not held responsible for the loss of cattle, though he is supposed to make a strenuous search for them.

177. Another agricultural servant is the *gobarwālī*. She is usually a woman and gets from 1 rupee to R. 1-8 a month and a *dhotī* worth about R. 1-4-0 once a year. She also receives a head-load of sheaves at the time of cutting and has the privilege of gleaning *sīlas* in her master's field. She adds to her scanty income by working in the fields at the time of weeding, cutting, etc. Her duty is to sweep the cattle-stall, remove the cow-dung, make it into cakes, dry and stack it for fuel. A *gobarwālī* who is a full-time servant is locally called *sonjnī* in the Sihorā and Murwāra tahsīls and *tahalnī* in the Jubbulpore tahsīl. In addition to duties mentioned she has to clean the grain, grind it into flour and do other odd jobs which her mistress tells her to do. In the Sihorā tahsīl she receives annually one *khandī* of grain (wheat, gram or mixed) which is locally called *nāpa* and another 5 *kuros* extra at the threshing time and a head-load of sheaves yielding almost 2½ seers of grain at the harvesting. A new *dhotī* is also given her annually. In the Jubbulpore tahsīl a full-time female servant is paid Rs. 3 a month in cash and a *dhotī* once a year. She has the privilege of receiving a *bojhā* of sheaves yielding about 10 seers of grain and of picking *sīlas* in her master's fields.

Gobarwāli.

178. The agricultural labourer is called *mazdūr*. At sowing and at harvest time wages rise owing to the demand for labour. In the Murwāra tahsīl it is customary to pay wages in kind and a labourer receives a *khandī* of grain at *kharīf* sowing and half a *khandī* at the time of *rabi* sowing. In the Sihorā and Jubbulpore tahsīls a casual labourer is, however, paid R. 1 in cash for every eight days and one *pao* of grain daily at midday during the time he is employed on sowing. For weeding only women are employed and paid 3¾ *pailīs* of grain a day in the Murwāra tahsīl and 5 or 6 pice in the Sihorā and the Jubbulpore tahsīls. For harvesting the wage in kind is reduced to half in the Murwāra tahsīl, and in the Sihorā and Jubbulpore tahsīls the fields are generally cut by piece-work (*kūtā*). The wages vary according to the labour involved and also according to the produce of the field. The customary wage for harvesting a field is ¼th of the seed sown in it. The agricultural labourers have also the privilege of *sīla* picking,

Field labourer.

which is not uniform in all parts of the District. In Bijerāghogarh and Barhī circles of Murwāra tahsīl the field labourers can glean after the farm-servant has done. But in the Barwāra circle of that tahsīl the owner has the right to receive one-fourth of the quantity gleaned. In the Sihorā tahsil the *sīlas* which are picked up are divided in equal proportions between the owner and the labourer.

The wage for earthwork in the construction of field embankments in the Bijerāghogarh and Barhī circles of the Murwāra tahsil is rupee 1 for a pit measuring 20 cubits long, 6 broad and 1 deep (1 cubit = 16 King's rupees placed in a straight line). In the Barwāra and Bilahrī circles of that tahsil 10 pice are paid for 100 cubic feet when the earth to be excavated is quite near the embankment. In the Sihorā tahsīl employers pay one rupee for 486 cubic feet or for a pit measuring 36 cubits long, 6 broad and one foot deep (1 cubit = 18 inches). In the Jubbulpore tahsīl one rupee is paid for a pit 30 cubits × 5 cubits × 1 cubit (1 cubit = 19 inches).

Seasons of employment.

179. The seasons of slack and full employment for agricultural labourers are somewhat as follows :—Beginning from August there is a good demand for labour in this month and the first part of September for weeding the autumn crops. By the time weeding is finished, the sowing of the spring crops begins, the customary date being Dasahra, which may be about the middle of September. By the time the spring crops are sown towards the end of October the harvesting of the autumn grains, first juār and then rice, til, and other crops commences. The harvest lasts till the end of December and a slack period then ensues during January and February. During this time many labourers collect grass and fuel for sale, while others are employed in threshing the crops. The fruits of the wild plum tree and of the bushes *makoi* (*Zizyphus Aenoplia*) and *karondā* (*Carissa Carandas*) also ripen at this time and form a welcome aid to the sustenance of the poor. With the beginning of March comes the spring harvest and full employment is then available for everybody for two months. A large number of agricultural labourers from Murwāra tahsil flock to the Haveli every year to cut the wheat crop. They are known as *chaithāras* because they come in the month of Chait (March-April). 'Year by year,' Mr. Fuller

said, 'the Gond comes down to the Lodhi in the Haveli; the 'same Gond to the same Lodhi and from father to son. Till 'the crop is ready to be cut, he occupies himself in roofing the 'house and doing any other casual work that may be required. 'Then he assists in reaping the crop and when it is threshed 'he returns home having received his food while he is there 'and taking across his shoulder as much grain as he can get 'into a *kāwar* load.' During May the threshing of the spring crops affords some employment, and a certain amount is obtained in embanking fields. This is also the time of the mahuā crop, the most important food product afforded by the forests. The people go out to gather the flowers in the early morning and coming back about 9 A.M. do any other work that they may have. Another very slack period is during June and July, the sowing of the autumn crops not causing any very large demand for labour. The little weed *chakorā* (*Cassia Tora*) grows at this time, and also the *sawān* grass (*Panicum Crus-Galli*) the seeds of which the people gather by sweeping a bent bamboo attached to a basket over the heads of the grass. The earnings of the spring harvest, during which each labourer gets two or three days' food for a day's work, also last through the hot weather. In a tract devoted mainly to autumn crops the end of the hot weather and the beginning of the rains is the hardest time for the casual labourer, but in wheat country the pinch is most felt in January and February during the Hindu months of Pūs and Māgh, and hence the people say punningly *Mā(g)hia parā* or 'Trouble has come.'

180. Another important class to whom annual contributions in kind are paid are the village artisans and servants. These are called locally *parjā* and their customary wages *jewar*. Excluding the kotwār and patwāri who now receive fixed stipends in cash, the principal village artisans and servants are the Lohār or blacksmith, the Barhai or carpenter, the Kumhār or the potter, the Nai or the barber and the Chamār or the tanner. Khān Bahādur Aulād Husain has the following remarks to make in his Settlement Report of the District:— 'The average number of blacksmiths and carpenters falls at 'the rate of two per village. This number is sufficient for the 'requirements of the agriculturists in order to repair and

Village servants.

'make their implements of husbandry. They are not found in 'every village but in all villages of importance and do the 'work for two or three small villages lying close by. In large 'villages and towns they are numerous and form a separate 'community of their own. Their remuneration is generally 'paid in grain and they are as a rule pretty well off.'

181. The Lohār or the blacksmith gets 5 *kuros* of grain for mending and sharpening the ploughshare and attaching it with iron hooks to the wooden part of a plough. He receives extra payment for sharpening and mending other iron implements of agriculture. At the Diwāli festival the Lohār, as in the Saugor District, prepares small iron nails and drives one into the threshold of every tenant, for doing which he receives a small present. The nail is supposed to keep evil spirits out of the house.

The Lohār.

182. The Barhai or carpenter mends the wooden parts of the plough. In the Sihorā tahsil the tenant supplies him with the wood and he prepares a new plough at the beginning of the agricultural year. He receives an annual allowance of 5 *kuros* of grain and another extra *kuro* for putting wooden handles to the *khurpī* (weeding implement), scythe, etc. For making the woodwork of a cart he is paid separately by job or by daily labour. The usual rate is 5 or 6 annas a day. At the time of the *rabi* harvest he receives a head-load of sheaves yielding about one *kuro* of grain. At the Diwāli he makes wooden pegs and drives them into the floor inside the door of the house, and for this the tenants make him a small present. Some carpenters combine the work of a carpenter and a blacksmith and earn higher wages ranging from 8 annas to 10 annas a day.

The Carpenter.

183. The barber is called Nau (Nai). He occupies an important place in the village economy. He shaves the ordinary villagers once a fortnight and the better class once a week. He receives about 3 *kuros* of grain annually for each adult male in the family, but is not paid for children under 12 years of age. At the harvest time of spring crops he receives a head-load of sheaves yielding about 1 *kuro* of grain. For supplying daily one leaf-plate and two leaf-cups to tenants who may care to take them, the barber receives one *kuro* of

The Barber.

grain extra each year. At the birth of a male child the barber's wife receives from 4 annas to 8 annas, and half of this for a female child. This present is locally called *chhabāri*. She rubs oil on the child and its mother for eight days after the expiry of the period of impurity and pares the nails on the 12th day before the ceremony for placing the child in the cradle is performed. The barber supplements his income by selling leaf-plates at the rate of 4 annas per hundred on festive occasions. He also carries the invitations at weddings, acts as torch-bearer, and massages the legs of his clients, for which he receives separate presents.

The Washerman.

184. The Dhobi is also a *parjā* and receives 18½ seers of grain annually for washing clothes at intervals of one or two months. He is paid separately for work done at the time of birth or death. The Dhobi is considered unclean and to see him in the morning is unlucky.

The Potter.

185. The Kumhār, though called a *parjā*, is not a regular village servant as he does not receive remuneration like the carpenter or the blacksmith. He sells his pots in the ordinary manner for which he is paid in cash at the time of purchase. In the Sihorā tahsīl it is customary for him to supply 24 earthen pots for a headload of sheaves at the harvest time. He has the privilege of gleaning without giving any part of it to the owner. At the time of marriage and funeral rites he supplies earthen pots and receives in exchange Rs. 2-8-0. For seating the bride at the wheel for the *sohāg* ceremony the potter's wife receives a rupee and a *dhoti*. At the Diwāli festival and in the month of Chait a magical ceremony locally called *khirkā bāndhnā* is performed which is believed to ensure the immunity of the village and the cattle from disease. In this ceremony a sacrifice of a pig must be made; the pig is supplied by the village Kumhār for which he receives a small present.

Village priest.

186. The village priest is called Purohit. He must be a Brāhman who can read and write. He receives no fixed remuneration for his services, but each tenant pays him according to his means or inclination. There is hardly any ritual in the Hindu family which is not conducted by the Purohit. He points out auspicious days for marrying, sowing, harvesting,

laying the foundation of the house, undertaking a journey etc., etc. He casts horoscopes and foretells clients' futures for the ensuing year. He assists in the worship of Mahādeo in the month of Shrāwan. During *Pitripaksh* or worship of ancestors during the first fortnight of Kunwār he sits daily on the bank of a tank or river and repeats *mantras* or sacred verses, while the villagers come and taking water in their hands, pour it on the ground and call upon the names of their dead ancestor. For averting ill luck he prescribes a ritual in which a gift to him or some other Brāhman is essential. When a man is at his last moments a gift of a cow is made to the Purohit and the dying man is assured that the cow will present herself at the bank of Baitarnī river which his soul can cross by holding her tail. He makes a round of the fields at the time of sowing and threshing and the tenants who seldom refuse anybody give him some grain. Although burdened with superstitious beliefs and unreasoning faith in his priests the Hindu cultivator is not without a humorous perception of his own weakness. A common proverb in the District is to this effect :—

> 'In the field where weeds do flourish, in danger is the crop,
> Though the priest continues eating, yet the hungry man must stop'

The Chamār.

187. The Chamār is paid five *kuros* of grain annually and a bundle of sheaves yielding about a seer of grain at harvest time. His duty is to supply the *jotā* (neck rope) and the *nāri* (leather rope) for the use of one pair of plough bullocks. In the Sihorā tahsil he has also to attach strips of leather to the sowing basket and the goading stick. In this District it is not customary to muzzle the bullocks at threshing time and consequently they eat a quantity of sheaves with the result that there remains a lot of undigested grain in their dung. To this dung the Chamār is entitled and he extracts from it as much as 3 *khandīs* of grain by washing with water. The Chamār is not now entitled to the skins of dead animals which belong to the owner, but he is paid 4 annas for the operation of skinning. Formerly the Chamār's duty was to supply shoes to the tenant and his farm-servant in return for the skin. *Golochan*[1] is appro-

1. A bright yellow pigment prepared from the bile of a cow and used in medicine as a tonic.

priated by the Chamār which he sells to a Baniā at a rate varying from R. 1 to Rs. 2 per tolā. The Chamār also receives extra payment for supplying new shoes or the repair of old ones.

MANUFACTURES.

188. Cotton hand-weaving was formerly an important industry, but has been reduced by the competition of the mills. At the census of 1901 there were 8,300 persons engaged in hand-weaving as against 14,230 persons in 1891. The decrease is principally among cotton-spinners and about 50,000 maunds of millspun thread are imported annually from the Bombay, Nāgpur and Hinganghāt mills. The cotton mill at Jubbulpore also supplies some thread. Coarse thread is however still spun for quilts and tape which is used for beds. The principal centres are Jubbulpore, Garhā and Majholi. There are no less than 2,000 families of Julāhas and Koshtās residing in the Jubbulpore city. Koris and Mehrās generally weave coarse cloth, while the Julāhas and Koshtās weave a better quality. The coloured *sāris* generally worn by women are still woven by hand and command a large sale. They are sold for Rs. 2 or Rs. 2-8, but the better ones fetch as much as Rs. 4-8-0. Coarse cotton cloths which are locally called *khādī* are woven in almost all the big villages. A *khādī dhotī* (10 × 1½ cubits) fetches about 10 annas and is said to last for a year. The weavers are generally in poor circumstances and are always indebted to the Baniā from whom they get advances in the shape of thread. The *sāris* called *chhīnts* are now generally of foreign make and, being brighter and of finer quality, are slowly replacing the village made *sāris*.

Weaving.

Cotton carpets are manufactured in the Jubbulpore jail. Carpets of variegated designs of all strength can be woven to suit the wishes of the customer. As the whole industry is carried on by hand the resulting product is of a highly satisfactory nature. Woollen blankets are made in small quantities by Gadarias or the shepherd caste. They are of very rough texture and cost from 14 annas to Rs. 5.

189. Dyeing is carried on in many villages, those situated on the banks of rivers being generally selected. The chief centres of the industry are Jubbulpore, Garhā, Shahpurā, Bijerāghogarh,

Dyeing.

Indrāna, Kūmhi, Ramkhiria, Majholi, and Gosalpur. The principal castes engaged in the trade are Chhīpas and Rangrez. The Chhīpas, generally Hindus, get their name from their practice of printing or stamping the cloths they dye with various ornamental patterns. Formerly they used the red dye obtained from the roots of the *al* plant or Indian madder, and this was cultivated as a crop. But it has been almost entirely supplanted by an imported chemical substance obtained from coal tar and manufactured in Baden, which is about 30 per cent. cheaper than the native dye. The Chhīpa prepares *sāris*, *razais* (winter covers), *gadelās* (bedding), *jāzams* (floor-cloth), etc. The cloth to be printed is first soaked in an essence of *harrā* (myrabolam), gum and *phitkarī* (alum) to give it a yellow colour. It is then dried and printed with stamps of different patterns which are locally made at Jubbulpore and cost from four annas to eight annas. Average prices of different articles including dyeing charges are as below :—

Sāri (13 cubits long and 1¾ cubits broad) R. 1-4, *rasai* from R. 1-4 to R. 1-5, *gadelā* from R. 1 to R. 1-5, *jāzam* from R. 1 to Rs. 10. A *jāzam* (7 cubits long and 3 cubits broad) costs about a rupee. All these articles are said to be of fast colour and command a large sale in the markets of Saugor, Damoh and Bilāspur. The Rangrez is a Muhammadan dyer. He generally dyes with indigo, safflower, turmeric and myrabolams. Red shades are obtained from safflower, yellow from *haldi* or turmeric, green from a mixture of indigo and turmeric, purple from indigo and safflower and *khāki* from iron-filings.

Metals, Gold and Silverware.

190. The number of gold and silver workmen in the District was 1570 in 1901. Most of them live at Jubbulpore. The gold and silver ornaments made are of the ordinary kind which are used by Hindus. Gold ornaments are practically never cast. In Jubbulpore the casting of silver ornaments is practised. The method of casting is as follows :—Moist sand is put into two iron boxes, and subjected to pressure till it becomes hard and adhesive. Each Sonār has a few stereotyped moulds, and the one selected is pressed into each of the iron boxes in turn, right side up in one case and left side in the other. In each box there is now a hollow corresponding to half the model.

Both boxes are then clamped together, so as to form a hollow mould of the article to be cast, into which the molten metal is introduced through a hole, the boxes being separated again when the metal has cooled and can be taken out.

Brass and copperware and bell-metal.

191. Workers and dealers in brass, copper and bell-metal numbered 696 persons in the District at the census of 1901. All the brass and coppersmiths (Tamerās) are not artisans, *i.e.*, they themselves do not work in brass and copper. There are two classes among them, the *mahājani* or capitalist class, and the working or artisan class. The latter, as a rule, do not keep shops for the sale of ware. They make vessels and articles on hire for the former class, who supply raw material to them and pay them at a fixed rate for their labour. The artisan Tamerā makes vessels out of brass sheets by hammering, while the Sonār works in alloys of copper by moulding or casting. The *mahājani* or capitalist Tamerā patronises both the classes of artisans, and keeps shops for the sale of the wares made by them. The industry is mainly confined to the manufacture of household utensils for every day use and there is little attempt at artistic design. Brassware is generally made from sheets of the raw material imported from Bombay. The sheets are generally of uniform quality, and the price varies according to their thickness. There are two methods of manufacturing brassware, by hammering and by casting. In the former process the sheet is beaten and flattened with wooden mallets. Discs and rings are marked out on it with compasses according to the size and dimensions of the article to be made, most articles being made in sections. The pieces so marked out are cut and separated from the sheet with a pair of scissors or a chisel, and are then hammered with a wooden mallet on a stone anvil until each piece assumes the required shape, when the hammer is used to make the sections exactly fit, after they have been heated and joined with solder. The second method consists in obtaining molten brass, either by compounding the alloy or by melting up pieces of old brass, and pouring the molten liquid into a mould of the required shape, or not unfrequently allowing it to cool and hammering it by the first process into the required shape. Copper utensils

are not manufactured to any extent, as the domestic use of the metal is not regarded with favour by Hindus. Panāgar and Murwāra are the principal centres of the brass and copper working industries. Besides brass and copper-ware, several articles, principally ornaments worn by the poorer classes, are manufactured of bell-metal; this in Jubbulpore is made of one part of pewter to four of copper. The alloy is made by a section of the Sonār caste, distinct from the gold and silversmiths. Bell-metal dishes and pots are chiefly manufactured at Bilahri, Bijerāghogarh and Barhī in the Murwāra tahsıl and are said to be exported to Sahdol (Rewah State) and Mirzāpur.

192. The iron industry of the District deserves notice. The ores are by far the most important and extensively worked in the Province. The method of smelting is by means of the small blast furnace, about 50 of which are working. The general method of refinement is to resmelt the bloom in a small open hearth and then to beat it out with hammers on an anvil. After refinement the ore is formed into round cakes, in which shapes it is put on the market. The annual average outturn of iron for each of the last 7 years ending with 1908 varied from 300 to 400 tons. The price for unrefined iron is about R. 1-8-0 to Rs. 2 per maund, or 20 to 26 seers the rupee, and for refined iron Rs. 2-8-0 to Rs. 3 per maund, or 13 to 16 seers the rupee. To estimate the profits of the furnace owner is a difficult matter, and the only conclusion that can be arrived at is that the industry affords a living wage, though sometimes but a precarious one, and that the profits are poor as the trade is unpopular. Mr. Begbie[1] sketches the history of the industry as follows:—'It cannot by any 'means be said to flourish, but it nevertheless plays a fairly 'important part in the internal economy of the District, and 'is in small danger of being driven out of the market. Its 'history of recent years is in many ways peculiar and instruc-'tive, and marks it out from all the iron industries of other 'Districts. We find bulking large in it two outside elements 'which in other Districts have played a minor part or no

Iron.

(1) "Monograph on the Iron and Steel Industry in the Central Provinces." P. 4.

'part at all—to wit, Government and the small capitalist 'employer of labour, generally referred to by writers, on the 'subject as the "middleman." As the intervention of 'Government has largely been dictated by considerations 'relating to the existence of this middleman, it must first 'be explained how he came into being. He owes his origin 'directly to the pressure of foreign competition. Before the 'days of imported English iron, the furnaces of Jubbulpore 'used as a rule to be financed by iron-workers who did not 'themselves know anything about smelting, but who gave 'the necessary advances for plant and material to the 'Agarias, who actually worked the furnaces. These Agarias 'have always been in a menial position, and, besides being 'wholly unambitious of independence, are among the poorest 'of the poor. When iron came to be imported on a large 'scale, the wealthier Lohārs found that it suited them to 'make use of the foreign material, which, though it might 'be more expensive, was in a more convenient form, and 'could be profitably worked up into finished articles with 'considerably less labour than the rough native blooms. 'They thus naturally drifted to the larger towns, where 'the imported material was more readily obtainable and 'the field of custom wider. Their less wealthy or less 'sagacious brethren remained in the villages, continuing 'to be largely dependent on local supplies. But not 'having the capital wherewith to make advances to the 'Agaria smelters they were faced with the prospect of a 'cessation or at least a shortage of raw material. 'Capital had to be obtained somehow, and the upshot was 'that a third party, usually a well-to-do mālguzār, was called 'in to supply the necessary funds. The power of the purse 'centred in this middleman, not being counterbalanced by any 'customary tie or practical interdependence such as obtained 'between the old Lohār employer and his Agaria employé, 'was naturally liable to grave abuse, and as a matter of fact 'did result in a strong tendency towards sweating on the part 'of the middleman. On the one side stood the middleman 'cutting down pay and clamouring for more work, and on 'the other side was the Agaria, determined to do as little 'work for his money as he could. Things came to such a 'pass that in 1885 Government determined to intervene with

'the object of ameliorating the condition of the smelter. The 'chief remedies prescribed were the granting of licenses by 'Government to the smelters direct, at a fair rate and renew-'able for a term of ten years, or if necessary longer at the same 'rate, the reduction of the high octroi rates and other taxation 'to which the smelters had hitherto been subjected, and the 'granting of money advances to the workers in times of 'distress. This course of policy proved of no permanent 'avail in resuscitating the industry; since it resulted in so 'much iron being produced that it became a drug on the 'market. In 1894 a new policy was initiated of handing over 'all the more important mines to the Forest Department to 'prevent the smelters being crushed by the heavy royalties 'imposed by mālguzārs. But even under these conditions 'there has been nothing that can be called true development: 'the price of native iron still rules high, and the demand is 'consequently small, the bulk of it being diverted to the 'cheaper imported article. Any considerable increase of out-'put is found merely to result in the drugging of the market, 'with the consequence that the smelter is eventually thrown 'out of work.'

Future prospects of the industry.

193. In 1903 two distinguished experts, Messrs. Martin and Louis, were deputed to examine the iron ore deposits of the District with the direct object of ascertaining whether the coal manufacture of iron and steel on a large scale could be forthwith commenced with any prospect of success. They found that the iron ore deposits of the District were altogether unsuitable as a basis for a large manufacture. Not only is the ore soft and powdery and therefore unsuitable to modern blast-furnace practice, in which, owing to the heaviness of the charges, hard lumpy ore is essential, and not only is the phosphoric content too high for the Bessemer process and too low for basic steel-making, but also the ferruginous material to be found in the District, though exceedingly plentiful, is nowhere concentrated into what may be called a workable ore deposit showing the essential characteristics of steadiness and persistence which are indispensable in a deposit that is to form the basis of an important industry. The scheme of founding a large steel and iron works near Jubbulpore was, therefore, though

condemned 'with much regret', condemned unreservedly. With regard to the industry as it exists at present there is little or no hope of permanent improvement. Foreign competition is too much for it. It is not because of any inherent superiority of the imported over the home-made metal that the latter has been practically ousted from the market. Indeed, the native iron is in itself a better article than the ordinary English iron so largely imported. It is described as being perfectly tough and malleable, and superior to any English iron, or even the best Swedish. But because of its cheapness the imported article enjoys a practical monopoly for all but a few special purposes. Another advantage besides cheapness that is offered by the imported article is the convenient form in which it comes on the market. Sheets, bars and rods are obviously more easy of manipulation than the amorphous mass which the native smelter brings to the bazar, and so are naturally preferred by the Lohār who has to work them up into the manufactured article. Thus in Jubbulpore, which was once famous for its *karhāis* and *tawās* of native iron, it is now very difficult to get these articles of anything but imported metal, because the shape in which the latter is received saves the blacksmith half his labour. In large towns the imported iron may be said to have practically ousted the native except for certain restricted purposes. Where great malleability is essential as in axe-heads, which have to be pierced by a large hole for the insertion of the shaft, native iron still holds its own.

Wrought work.

194. The Lohār of the ordinary village is in essence and origin a village servant, on the same level as the kotwār, patwāri or barber. With the growth of large towns, a new type of Lohār came into existence, who receives payment by the job and whose patrons are not bound to him by any customary tie. But his work remains essentially similar in character to that of the village Lohār, although the introduction of English iron has led to the manufacture of certain articles, such as cauldrons, buckets, cases, etc., which were generally beyond the capacity of the native craftsman whose raw material consisted of shapeless native blooms of iron. Almost the whole of the raw material used by Lohārs comes from England *via* Bombay. The chief importers are Bohrās who

sell the iron retail to the Lohārs. Large towns such as Jubbulpore serve as distributing centres for a wide area of country, the iron and steel being carried to the various periodical country markets. In Jubbulpore itself most of the iron purchased by the Lohārs is scrap iron offered for sale by the Railway Companies, the price being only Rs. 2 to Rs. 2-8-0 per maund. The usual forms in which English iron is received are sheets, long thin bars, small square bars, rods or wire. The manufacturing side of the Lohār's trade is mainly devoted to the making of agricultural implements, such as shares for ploughs, *pānses* for *bakhars*, scythes, sickles, matchlocks and goads and to the construction of axles for carts. One of his main functions also is to put tyres on wheels. He also makes axes and pickaxes, and domestic utensils such as *tawās*, *karhāis*, and *dols* (buckets). The utensils made at Jubbulpore and Panāgar have some reputation and are exported as far as Nāgpur.

Steel.

195. Besides the ordinary wrought-iron, a peculiarly hard steel iron known as *kherī* is produced, notably at Ghughrā. This *kherī* is usually called steel, and on heating it gives the usual temper colours of steel from yellow to blue, but on fracture it is more like cast-iron in appearance. It is really nothing but iron produced by the usual methods from an ore which is rich in manganese. It is in great demand for forming the cutting faces of implements, such as scythes and axes, and the striking faces of hammers, the heads of anvils, &c. It fetches a higher price than the ordinary iron, averaging about 10 seers the rupee.

Factories.

196. There are seven factories in the District. The Gokuldās and Ballabhdās Spinning and Weaving mills were established in 1885 and employ about 700 men, women and children. The mills have at present 277 looms and 15,208 spindles, and 152 more looms with the necessary machinery are being added. The average annual outturn of yarn is 1,219,849 lbs. of the value of Rs. 4,67,534 and of cloth 586,538 lbs. of the value of Rs. 2,98,924. The capital employed is Rs. 8 lakhs and a dividend of 7½ per cent. is paid. Messrs. Mackinnon and Co.'s Brewery with a capital of Rs. 3 lakhs was started in Jubbulpore in the year 1897. It manufactures

malt liquor. The daily output of the brewery is about 30 hogsheads. The brewery works for only 3 months of the year, and gives employment to about 60 persons. The concern is said not to be paying now, as the reforms in the canteen system introduced by Lord Kitchener have robbed Indian breweries of their practical monopoly of the supply of beer to the British soldier. The brewery also contains an ice machine which gives a handsome return on its capital. The country liquor distillery is located at Murwāra. This was established by Messrs. Carew & Co., the total capital involved being Rs. 4 lakhs. The distillery produces nearly 2 lakhs of gallons of mahuā spirit annually and employs about 85 men daily on an average. Five of the C. P. Districts draw their supplies of country liquor from this distillery. A flour and oil mill was established at Jubbulpore in 1887. It produces over 25,000 maunds of flour every year, most of which is supplied to the local Commissariat Department, but some is also sold in the city. Besides this flour-mill worked by steam, there are a number of small native flour mills worked by water power. These are situated in the beds of the rivers Gaur (near Jubbulpore) and Katnī. The gun carriage factory was started by the Government in Jubbulpore in the year 1904. It is now the only factory of its kind in India. It produces military fittings to the value of from 6 to 16 lakhs of rupees annually and employs about 1,800 men. It contains the largest machine shop and foundry in India. The timber used in the factory is principally taken from Nepal and Burma. The C. P. *sāl* has been tried but proved unsuitable as it splits too easily.

Pottery.

197. Messrs. Burn & Co. are the premier pottery firm in India. Their firebricks, drainage pipes, tiles, jam pots, filters, vases, battery jars, porous cells, closet pans, Commissariat articles, spittoons, cream dishes, etc., have gained a reputation for first class workmanship and quality. For the past 10 years the firm has never failed to pay a 25 per cent. dividend. Special kilns are constructed for baking articles of pottery. The ordinary kilns used for tiles and pipes are not suitable, as it is important that all smoke should be excluded and that the flames should not come into contact with the clay. The kilns

used are known as muffled kilns and are covered at the top by a doubled roof. The flames from the furnaces play upon the lower side of the floor, and spread themselves upwards, working between two roofs. By this means the pottery is entirely isolated frcm all contaminating influences, such as dust and smoke. The kilns are heated up to a bright red heat for 4 days, after which they are left to cool for 3 days more. The pottery is then taken out and immersed in the glazing solution which is procured from England. After this the glaze is burnt into the pottery by another five days baking in the kiln. The article on being taken from the kiln is ready for the market. The 'Perfect Pottery Works, Ltd.' was started in 1905 by a manager from Messrs. Burn & Co.'s pottery, the orginal capital (1½ lakhs) being supplied by Rājā Gokuldās. The total capital was subsequently raised to Rs. 4 lakhs by the issue of new shares. The works are doing well and have recently declared a dividend of 9 per cent. This company manufactures the same class of goods as Burn & Co., Ltd. Messrs. Frizzoni and Co. of Cawnpore have recently opened a tile and brick factory, which is said to be making good progress. A Bombay Syndicate is shortly about to start a porcelain factory close to Katnī, suitable raw materials having been found there. At the census of 1901, 5,881 persons were engaged in pottery, most of whom belong to the Kumhār caste and usually supply the villagers with earthen pots for cooking and storing water and grain. *Chilam* (pipe for smoking tobacco) and *dabbi* (lamp for burning kerosine oil) are said to be the speciality of Bijerāghogarh in the Murwāra tahsīl.

Stone.

198. Stone and marble workers with whom may be included grindstone and millstone makers numbered 1172 persons in the District at the census of 1901. Marble is only found at Bherāghāt in the District and is worked in the Jubbulpore town. Flagstones extracted from the quarries of Murwāra fetch from Rs. 18 to Rs. 25 per hundred cubic feet. Heavier stones which are used in the construction of buildings and bridges sell at 6 annas per cubic fcot. The stones of Murwāra are exported to the distant markets of Calcutta and Allahābād. Many of the Bengal-Nāgpur and East Indian Railway bridges and stations are said to have been built from the stone and

lime of Murwāra. Soft stone (*gaurā patthar*) is found at Bherāghāt and Sagrā (Jubbulpore tahsīl) from which stone plates, cups, Mahādeo *lingas* and buttons are made. Grinding mills, mortars and statues are manufactured in Tewar from the stone found in Katangā in the Jubbulpore tahsīl. A grinding mill is sold for a price varying between R. 1 and Rs. 2. The art of stone carving has almost become extinct. 'The sculptors of the last generation,' says Mr. A. K. Smith,[1] 'were possessed of a very respectable degree of skill and 'their widely scattered works show that few Districts fifty 'years ago can have been without a carver of some local 'repute. This disappearance of stone carving from places 'where once it flourished is said to have taken place within 'the memory of old men now living and the cause is not far 'to seek. It is precisely within this period that the means 'of travel so vastly improved, and the new ease in getting 'about has had the same effect on local sculpture as on other 'local industries. Competition has become sharper and the 'standard expected has risen, so that architects of temples 'and wealthy people with a desire to decorate their dwell-'ings are less inclined to make the most of the local talent 'and more ready to import carvers from a distance. Thus in 'the smaller towns the local sculptor who never possessed 'very much skill has been driven to abandon his hereditary 'occupation as no longer lucrative and to take to plaster 'moulding, mason's work or other kindred occupations.'

Lime.

199. One of the most important industries of the District is that of lime at Murwāra. About 20 lime kilns are at work and a capital of about Rs. 2 lakhs is employed. Three of the lime kilns are owned by Europeans, 1 by a Pārsi and the rest by Hindus. The outturn in 1906 was 47,948 tons of the value of Rs. 39,263 as against an output of 92,340 tons valued at Rs. 68,578 in the previous year. The decrease in the outturn in 1906 is attributed to the competition of new lime-stone quarries at Satnā in the Rewah State. The Satnā lime is reported to be of inferior quality to that of Katnī; but the stone lies nearer the surface and the cost of quarrying the ore is thus reduced. From 500 to 1,000 persons are engaged in the in-

1 'Monograph on the stone-carving and inlaying of the Central Provinces,' p. 5.

dustry at Murwāra and the average outturn for three years ending 1907-08 was 64,750 tons, value Rs. 53,413. The best lime locally called *mohrī* is obtained from limestone burnt with wood. It fetches from Rs. 30 to Rs. 35 for 100 maunds. Limestone burnt with coal gives an inferior kind of lime locally called *gaj bhattā* and fetches about Rs. 30 for every 100 maunds. *Gardā* (dust of lime) sells from Rs. 6 to Rs. 30 per 100 maunds; the price varies according to the quantity of coal and ashes mixed with it. The lime produced at Murwāra is of a superior quality, being very white and quite pure. It is sent as far as the Punjab, the United Provinces, Assam and Berār. Messrs. Tāta & Co. of Bombay have lately obtained a license for some lime-quarries near Murwāra and are proposing to open out large works in connection with their scheme of iron works at Sini on the Bengal-Nāgpur Railway. To a small extent lime is manufactured at Kauwāror (Sihorā tahsīl) and at Panerā, Pachperi and Karondī (Jubbulpore tahsīl). Limestones are collected from the fields and burnt. The lime is sold from Rs. 22 to Rs. 24 per 100 cubic feet.

Metallic paints.

200. An important manufacture of the District is that of Olpherts' Metallic paint prepared at Katnī Murwāra. It is a purely indigenous product prepared from red oxide of iron locally called *dhau*. This is obtained from a mine in Jauli (Sihorā tahsīl) and taken to Murwāra where it is ground to an impalpable powder between stones worked by water-power. A pound of iron oxide paint, when mixed ready for use in the proportion of two-thirds oxide and one-third linseed oil, should cover twenty-one square yards of sheet iron. It resists a strong heat and is therefore advantageously applied for painting parts of machines, boilers, bridges and other iron structures. The price of the paint at the works at Katni Junction, East Indian Railway, is 7 rupees for quantities of or under one ton; at Calcutta 9 rupees and at Bombay 8½ rupees. Ball says of it:—'This mineral paint has proved 'to be the cheapest in the Indian market, it lies smoothly 'on tiles, bricks and plaster. It is now used by the principal 'Rail and Steamship Companies, and has stood a practical 'test on the metal work of the principal bridges in India. 'It has been found most useful on the inside of boilers.'

At present Mr. Olpherts has a practical monopoly of the red oxide paint but recently several Bombay and Calcutta firms have been seriously considering the question of erecting paint works in the Jubbulpore District. Another paint prepared is Olpherts' yellow ochre locally called *rāmraj*. The ochre is obtained from the quarries at Kulkaria and Bharolī villages in the Rewah State. It is diluted with plenty of water in a vat and the mixture then runs through a fine strainer into another vat. The ochre having settled down the water is drawn off by means of a syphon. When dry the ochre is made into fine powder and then becomes fit for market. It is said to possess a great staining power.

Miscellaneous.

201. Among the miscellaneous industries of the District is the manufacture of glass bangles by Kacherās, but the bangles imported from Austria find a ready sale and are gradually replacing the rough local products. The Sīsgars of Katangī also prepare small bottles of glass which are used in storing water of the Nerbudda river. This water is taken to Bāndakpur in Damoh District and poured on the idol of Mahādeo at Shivrātri and Basant Panchami. The Lakherās, *i.e.*, people who deal in articles of lac, are met with only in towns. They make lac bangles which are worn at the time of Rakshābandhan in the month of Shrāwan. They also make *chapetās*, dice-like play things, used by girls. The District has 2094 carpenters. In large towns there are master carpenters who take contracts and supply furniture for Government and for Europeans and rich native gentlemen; besides these, there is the journeyman carpenter of the town, who works by the day either in the employment of a master carpenter or on his own account; and lastly there is the village carpenter who is a village servant and makes the wooden parts of agricultural implements. The wood work of Jubbulpore is generally very good and some wood carving is also done there. Boot, shoe and sandal makers number 7274 in the District. The ordinary articles prepared by the Chamār are common shoes of red or yellow coloured leather. Shoes made in Bilahri have some reputation and are exported to Chhattīsgarh and other places. In towns, however, there has grown up a large demand for European shoes for which leather is imported from Cawnpore or Calcutta.

The village Chamār prepares the leather ropes for raising and lowering *mots*, neck ropes of leather for bullocks and *dholaks* or hollow cylindrical wooden drums covered with leather.

Weights and Measures.

202. In the District and tahsil head quarters the table of ordinary weights in use is :—

1 *chittack*	=	5	tolās
1 *pao*	=	4	*chittacks*
1 seer	=	16	*chittacks* or 80 tolās
1 *paseri*	=	5	seers
One maund	=	40	seers.

The ordinary grain measures in the interior of the tahsils are as below :—

1 *kuro*	=	5	seers
1 *barahiyā*	=	1¼	seers
1 *adhelī*	=	10	*chittacks*
1 *chahuti*	=	5	*chittacks*

But in the Bijerāghogarh pargana of the Murwāra tahsil there are local measures as given below :—

1 *kuro*	=	4	seers
1 *kurai*	=	3½	seers or 4 *pailās*
1 *pailā*	=	4	*doms* or 14 *chittacks*
One *dom*	=	3½	*chittacks*

In a few places, a *kuro* is equivalent to 5 seers and 1 chittack. Grain at towns on the railway line is ordinarily weighed and not measured. The maund for *kirāna* is equivalent to 50 seers in Murwāra. *Ghī*, sugar, salt and metals are always sold by weight. There are two kinds of seers, *viz.*, the *pakkā* and the *kachchā*. A *pakkā* seer is equivalent to 100 tolās and a *kachchā* to 80 tolās. The *pakkā* seer is used for weighing tobacco, *gur*, lac and *harrā* and also very rarely for weighing sugar. Precious metals are sold by the tolā which is equivalent to the King's rupee.

The area of land is still calculated by the people in terms of seed sown. Few understand the *bīgha* or acre. The standard for estimating the area of land is the amount of wheat and gram which would be sown in it. 13 *kuros* of wheat and gram usually represent the capacity of one acre.

Measures of length are :—3 *anguls* equal one *girah* ; 16 *girahs* make a *gaz* or yard ; two *hāths* normally make a *gaz*, but they really somewhat exceed it. For distances, two measures are used, one is the ordinary English mile, two of which make a *kos*, while the *kisāni* or as it is locally called the Gondi *kos*, is equivalent to 3 miles.

The Vikrama calendar.

203. In the Northern Districts the Vikrama era and calendar are used. This era probably originated in Mālwā and commenced on Thursday, the 18th September 57 B.C. It is attributed to a king named Vikramāditya, but there are various theories regarding its name. The year 1908 was 1964-65 of the Vikrama era. In horoscopes and other ceremonial documents it is customary to quote also the Saka year which is in common use in the Marāthā Districts and commenced in Vikrama Samvat 135 or A.D. 78. The two calendars slightly differ in the fact that each month of the Saka year begins a fortnight later. The Vikrama months begin with the full moon and the Saka months with the new moon. The months of the Vikrama calendar are Chait, Baisākh, Jeth, Asārh, Sāwan, Bhādon, Kunwār, Kātik, Aghan, Pūs, Māh and Phāgun, practically the same as those of the Saka calendar, but the latter retain the correct Sanskrit form, whereas the Vikrama names are Hindi corruptions. But the Vikrama month Kunwār is called Ashvin in the Saka calendar and the month Aghan is called Mārgashir. In the beginning the Vikrama year commenced with Kārtik as it still does in Gujarāt, but in Northern India the new year's day was shifted to the first day of Chait falling in March. Both eras are luni-solar and the year consists of about 355 days, but is made to correspond very nearly with the Gregorian year by the interposition of triennial intercalary months.

Markets.

204. The District contains no large markets, the most important being those of Panāgar, Silondi, Majholi and Umaria of the Sihorā tahsīl. The Panāgar market is largely attended by people from all parts of the District and also from the states of Maihar and Pannā. Cattle and grain are sold, about 5000 head of cattle being sold per week in the early part of the rainy season and 2000 at other times. The Sanitation

Committee of Panāgar realizes about Rs. 1000 per year on account of Registration fees on cattle sold. Silondi is on the borders of the Mandlā District and serves as a market for its produce, *harrā* and lac, timber, hemp and grain being the principal articles sold. At Majholī cattle and grain are sold. The markets at Baghrāji, Barelā, Bargī, Pātan and Katangī (Jubbulpore tahsīl), Majhgawān and Sleemanābād (Sihorā tahsīl) and Bijerāghogarh and Barhī (Murwāra tahsīl) are of minor importance. Baghrāji market is famous for its iron utensils and agricultural implements. Barelā is another market for the disposal of the produce of Mandlā.

Fairs.

205. A number of annual fairs are held in the District, the most important of which are those of Bherāghāt, Tilwāra, Kūmhi (Satdhāra), and Bijerāghogarh. The Bherāghāt fair is held at Bherāghāt, which is situated at the junction of the holy waters of the little Saraswatī with those of the Nerbudda. It is only 3 miles from the Mīrganj station on the Great Indian Peninsula Railway and 13 miles from Jubbulpore. The place is one of the holy bathing-places on the Nerbudda. The fair begins on Kārtik Sudi 15 and lasts for 4 days. It is attended by about 40,000 people from the neighbouring Districts. Cloth, metal ware, jewellery and other articles are sold in large quantities, the value of the articles sold being estimated at 1 lakh of rupees. On the conclusion of the fair the shops for the sale of metal ware are removed to Jubbulpore where they remain for about a month. At one time an agricultural exhibition was held at the fair and prizes were distributed but it has latterly lost some of its old importance.

Another important fair is that at Tilwāraghāt on the banks of the Nerbudda. It is held on the Til-Sankrānt day (January) in honour of the god Mahādeo. It is attended by about 20,000 persons and temporary shops are opened for the sale of cloth and other merchandise. A fair is also held at Satdhāra (near Kūmhi) on the banks of the Hiran river on the same day and in honour of the same god. It lasts for two days and is attended by about 2000 people. A considerable trade is done in wood and wood-work. Small fairs are also held at Ganjtāl near Sihorā, and Bhamkā near Bijerāghogarh in the Murwāra tahsīl on Til-Sankrānt day. Gwārighāt, a Bengal-Nāgpur Railway station, on the bank of

the Nerbudda some 6 miles from Jubbulpore, is the scene of a fair on every Hindu festival. The attendance, which sometimes reaches 20,000 people, is mostly drawn from the Jubbulpore city, and the object of the visitors is to bathe in the sacred waters.

TRADE.

Trade in former years.

206. At the thirty years' settlement which was completed in 1867 the District was quite unconnected with the railway though the construction of the East Indian Railway had been taken in hand. Before the opening of the railway the trade of the District was carried on by Banjārās and others by means of pack-bullocks while country carts were also used for carrying the produce of the District to Mirzāpur. The other roads were impassable for carts. The local grain is recorded to have been of fair quality ; *gur* and hemp were good while the cotton had a good reputation in the Mirzāpur market as the 'Bhourgarh cotton.' *Ghī* and hides are also said to have been largely exported towards the north. The import trade consisted principally of salt from the west, sugar, spices, brass and copper utensils and English cotton and woollen manufactures from the north, some rice from the south and jungle produce from the east beyond the border. Four years after this settlement the East Indian Railway entered the District from the direction of Allahābād and three years later the Great Indian Peninsula Railway entered from the direction of Bombay. The construction of these two railway lines led to a very large rise in the prices of agricultural produce and gave the greatest stimulus to the District trade, the most important feature of which was at the last settlement in 1895 the export of wheat, linseed, lac and *harrā* (myrobolams). Khān Bahādur Aulād Husain, the Settlement Officer, wrote of the trade of the District as follows :—'Lac was exported at the time 'of last settlement but at that time there was no trade 'in *harrā* which has since become an important article of 'commerce. It is chiefly exported to Bombay and thence 'to Europe for use in dye-making. A new article of 'commerce which has come to notice since last settlement 'is the limestone of Murwāra, which is very highly valued

'and exported to Calcutta and to towns in the North-Western 'Provinces. Another commodity of some importance is 'the paint prepared by Mr. Olpherts from iron-ore at Jauli 'which he holds on lease from Government. This paint is 'exported in large quantities and is used for painting ships 'and railway waggons. The total exports from Murwāra 'of limestone and Olpherts' paint and their value as as-'certained for the last three years are given below :—

	Mds.	Rs.
Limestone	1,204,115	2,93,000
Olpherts' paint	5,115	20,416'

Statistics of rail-borne trade.

207. Statistics of rail-borne traffic have been obtained for four years, that is from 1904 to 1907. According to them the exports of the District have averaged Rs. 1·36 crores for the last four years against Rs. 2·36 crores for the Nāgpur District. These figures represent Rs. 20 per head of population against Rs. 31 for Nāgpur and Rs. 38 for Wardhā. The imports in this District unlike those of other Districts exceed the exports and are of the average value of about Rs. 1·75 crores representing Rs. 25 per head of population as against Rs. 2·16 crores and Rs. 29 respectively for Nāgpur. The imports have risen both in quantity and in value ; the excess in their value over that of exports has advanced from Rs. 19·87 lakhs in 1904 to Rs. 39·41 lakhs in 1906 and Rs. 50·22 lakhs in 1907. The construction of the Sātpurā Light Railways to Seonī and Mandlā has considerably affected the export trade of Jubbulpore. The following statement shows the quantity and value of the principal exports and imports for the four years from 1904 to 1907.

Exports. Figures represent thousands.

Articles	1904.		1905.		1906.		1907.	
	Quantity	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Mds. 000	Rs. 000	Mds. 000	Rs. 000	Mds. 000	Rs. 000	Mds. 000	Rs. 000
Wheat	838	23,57	206	6,06	213	7,34		17,14
Gram and Pulse	164	3,69	114	2,85	170	5,72	172	5,91
Til Seed	156	5,41	125	6,34	177	10,09	135	8,87
Rape and Mustard Seed...	93	3,98	89	4,34	63	4,01	80	5,35
Linseed	125	4,31	62	2,54	60	2,87	65	3,46
Hemp	125	6,72	48	2,60	58	3,13	45	2,40
Myrobolams	152	2,26	106	1,65	59	72	108	1,45
Lac	23	8,25	25	9,29	28	11,97	32	9,62
Stone and Lime	1,041	65	1,021	64	1,176	6,99	1,240	7,95
Hides and Skins	11	3,53	13	4,58	37	12,78	16	5,23
Fresh Fruits	32	1,15	23	93	27	98	39	1,26
Other Articles (Value known)	895	66,38	1,025	69,71	1,055	82,70	1,174	85,07
All Other Articles (Value unknown) ...	2	Unknown.	146	Unknown.	297	Unknown.	364	Unknown.
Total ...	3,657	1,29,90	3,003	1,11,53	3,420	1,49,30	3,927	1,53,35

Imports. Figures represent thousands.

Articles.	1904.		1905.		1906.		1907.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Mds. 000	Rs. 000	Mds. 000	Rs. 000	Mds. 000	Rs. 000	Mds. 000	Rs. 000
Coal and Coke	934	2,33	804	2,01	1,043	2,61	1,247	3,12
Raw Cotton	14	3,11	23	4,02	12	2,23	19	3,47
Cotton Manufactures	57	32,87	57	31,79	64	37,87	63	38,30
Rice	278	8,49	338	12,45	250	10,69	292	13,39
Gunny Bags	48	4,69	29	2,96	31	3,61	32	3,86
Metals	59	8,01	96	9,37	101	15,86	82	15,86
Kerosine Oil	53	2,44	58	2,64	64	2,97	75	3,59
Salt	175	5,68	179	5,04	231	6,06	270	6,41
Betelnuts	5	68	8	1,28	7	1,27	10	1,86
Sugar	154	12,58	151	12,27	164	12,65	166	12,97
Tobacco	37	3,99	37	3,96	33	3,35	29	2,79
Timber	496	10,09	691	13,98	857	17,15	793	16,08
Other Articles (Value known)	867	54,81	903	47,75	997	72,39	1,229	81,87
All Other Articles (Value unknown) ...	4	Unknown.	58	Unknown	20	Unknown	14	Unknown.
Total ...	3,181	1,49,77	3,432	1,49,52	3,874	1,88,71	4,321	2,03,57

208. During the four years the exports were lowest in 1905, being 3,003,000 maunds of the value of Rs. 111·53 lakhs, and highest in 1907 being 3,927,000 maunds valued at Rs. 153·35 lakhs. The average during these four years was 3,501,000 maunds, value Rs. 136·02 lakhs. Wheat, gram and pulse, til, rape and mustard seed and linseed and hemp amongst agricultural produce, myrobolams and lac and mahuā seed amongst forest produce and lime and stone are the principal articles of export. In 1904 wheat was exported to the extent of 838,000 maunds of the value of Rs. 23·57 lakhs against 1,344,000 maunds and 1,017,000 maunds in 1891 and 1892 respectively. Owing to the poor outturn in 1905 and 1906 the exports fell to 206,000 and 213,000 maunds, value Rs. 6·06 and Rs. 7·34 lakhs respectively; but there was a slight recovery to 457,000 maunds, value Rs. 17·14 lakhs in 1907. The average for the years 1904-07 was 429,000 maunds valued at Rs. 13·53 lakhs. Gram and pulse are exported yearly to the extent of about 155,000 maunds of the value of Rs. 4·54 lakhs. The exports of juār show very great fluctuation from only 2,000 maunds valued at Rs. 3,000 in 1904 to 78,000 maunds, value Rs. 1·77 lakhs in 1906. Among oilseeds whose exports form 9 per cent. of the average total exports, til is the most important accounting for 148,000 maunds, value Rs. 7·68 lakhs yearly. Rape and mustard seed come next and are responsible for an average export of 81,000 maunds valued at Rs. 4·42 lakhs. The export of linseed was the greatest in 1904 with a record of 125,000 maunds, value Rs. 4·31 lakhs, but even this was less than the figure for 1893 when 133,000 maunds were recorded by Khān Bahādur Aulād Husain as having been exported. In the succeeding three years 1905-07 the export never rose above 65,000 maunds and varied between 60,000 and 65,000 maunds. Wheat, gram and pulse, til and linseed are all sent to Bombay. Hemp exports were the largest in 1904 with 125,000 maunds of the value of Rs. 6·72 lakhs. In the following three years they ranged between 45,000 maunds, value Rs. 2·40 lakhs in 1907 and 58,000 maunds, value Rs. 3·13 lakhs in 1906. The article is largely consigned to Bombay and Calcutta for despatch to England, Germany and Italy. Exports of *harrā* (myrobolams) varied between 59,000 maunds valued at Rs. 72,000 in 1906 and 152,000 maunds,

value Rs. 2·26 lakhs in 1904 and averaged 106,000 maunds, value Rs. 1·52 lakhs. Like other articles this too shows a decline when compared with the figures for the triennium closing with 1893. The highest export in these three years was 209,000 maunds in 1892 and the lowest 96,000 maunds in 1893. The exports of lac showed an appreciable fluctuation during the three years 1891 to 1893, 32,000 maunds having been recorded in 1891, 13,000 in 1892 and 14,000 in 1893. In the four years 1904 to 1907 the article shows practically a steady export of about 27,000 maunds valued at Rs. 9·78 lakhs. Among other articles of forest produce exported are mahuā, *chironjī* and gum. *Harrā* and mahuā come in large quantities from Mandlā, Damoh and Seonī. The only other important head of export is that of lime and stone, of which the export advanced from 1,041,000 maunds, value Rs. 65,000 in 1904 to 1,240,000 maunds, value Rs. 7·59 lakhs in 1907, and averaged for the four years 1,120,000 maunds, value Rs. 3·96 lakhs. The limestone of Murwāra contributes largely to the total. The limestone is sent away unslaked, that is, after being burnt with coal or wood, about ten lakhs of maunds being sent out in a year. It is used for building, plastering and paper making and is also a disinfectant. The value of unslaked lime is Rs. 35 per 100 maunds and of slaked lime Rs. 10 per 100 maunds. A maund of unslaked makes 3½ maunds of slaked lime. Soapstone is also exported in blocks. The produce of the Fuller's earth quarry at Murwāra is exported for use in paper mills. There are a number of sandstone quarries in or near Murwāra, from which excellent stone is obtained and exported in the shape of posts and slabs. *Ghī* is annually sent out to the extent of 16,000 maunds of the value of Rs. 4·59 lakhs. Some is produced locally but much comes from Seonī and Mandlā. There are cattle-slaughtering industries in Jubbulpore, Sihorā, and Murwāra and hides and skins alone are responsible for an export of 19,000 maunds of the value of Rs. 6·53 lakhs every year. The firm of Ralli Brothers has lately begun to take part in the export trade for Calcutta. Hides of cattle go to Calcutta, goat and sheep skins go to Madras, Cawnpore, Calcutta and Bombay. About one lakh of hides annually is exported from Jubbulpore station alone. Dried meat is sent to Burma; blood is dried and sent to the

Continent for manure and bones are sent to Calcutta and Bombay where they are ground up for manure. Piece-goods are also exported, the average yearly export being 20,000 maunds of the value of Rs. 10·46 lakhs. The mill cloth is sold to local merchants who distribute it to the outlying Districts of Narsinghpur, Saugor and Damoh. Roofing and flooring tiles, bricks and stoneware pipes made at the pottery works in Jubbulpore and the chocolate coloured paint produced from yellow ochre and red oxide of iron at Olpherts' works in Murwāra are also exported.

Imports.

209. As will appear from the statement already given the principal imports into the District are coal and coke, rice, salt, sugar, timber, metals, cotton manufactures, kerosine oil, tobacco and gunny bags. The imports under coal and coke rose from 934,000 maunds, value Rs. 2·33 lakhs in 1904 to 1,247,000 maunds, value Rs. 3·12 lakhs in 1907 and averaged for the four years 1,007,000 maunds, valued at Rs. 2·52 lakhs. This article is required for consumption in the mills and factories. Rice which comes from Chhattīsgarh shows an average annual import of 289,000 maunds of the value of Rs. 11·25 lakhs, having ranged between 250,000 maunds and 338,000 maunds during the years 1904 to 1907. The successive reductions of duty on salt in 1903, 1905 and 1907 have brought about a rise in the import of this article from 175,000 maunds in 1904 to 270,000 maunds in 1907. The bulk of the salt consumed comes from the Sāmbhar lake, and some is also sent from Bombay and Gujarāt. The imports of 1907 were equivalent to 31¾ lbs. per head of population, a very high figure indeed. Sugar imports also indicate an advance from 154,000 maunds, valued at Rs. 12·58 lakhs in 1904 to 166,000 maunds, valued at Rs. 12·97 lakhs in 1907, having averaged 159,000 maunds of the value of Rs. 12·62 lakhs. Including the local output the consumption per head of population came to 19¾ lbs. in 1904 and 21 pounds in 1906 and 1907. *Gur* or unrefined sugar accounts for a little over two-thirds of the total imports; this is obtained from Patnā, Meerut and Arrah while the refined quality comes mainly from the Mauritius. 709,000 maunds (on an average) are the yearly imports of timber. To this total fire-wood probably required for use in the lime kilns of Murwāra contributes

more than 75 per cent., 570,000 maunds of the value of Rs. 11·39 lakhs being annually brought in. Metal imports varied between 59,000 maunds, value Rs. 8·01 lakhs in 1904 and 101,000 maunds, value Rs. 15·86 lakhs in 1906 and averaged 84,000 maunds of the value of Rs. 12·27 lakhs. The chief items under this head are those of wrought iron, manufactured articles of iron and unwrought iron, predominating amongst which are the imports of wrought iron which rose from 25,000 maunds, valued at Rs. 2·01 lakhs in 1904 to 57,000 maunds, value Rs. 5·97 lakhs in 1906. Much of the iron imported is Belgian which is very inferior and brittle in comparison to the local iron. Cotton manufactures are imported to the value of Rs. 35·21 lakhs every year, the highest figure being reached in 1907 with a record of Rs. 38·30 lakhs. European piece-goods form about 50 per cent. of the total figures under this head and have risen from 25,000 maunds, valued at Rs. 17·82 lakhs in 1904 to 31,000 maunds, valued at Rs. 21·98 lakhs in 1907. The imports of Indian piece-goods show no tendency to increase, averaging 15,000 maunds valued at Rs. 7·96 lakhs. The average imports of European twist yarn were 7000 maunds of the value of Rs. 4·18 lakhs, similar figures for Indian yarn being 9000 maunds valued at Rs. 2·66 lakhs. European piece-goods come principally from Bombay and Calcutta while country cloth is brought from Ahmadābād, and also from the Berār and Nāgpur mills as the local mills cannot weave cloth of any fineness. Raw cotton for the local mills is brought in from Narsinghpur, Hoshangābād, Bhopāl, Berār and Khandwā, the average import being 17,000 maunds of the value of Rs. 3·21 lakhs. Imports of kerosine oil, which is now generally used in the District, have advanced considerably during the four years, from 53,000 maunds, value Rs. 2·44 lakhs, in 1904 to 75,000 maunds, value Rs. 3·59 lakhs in 1907. A considerable quantity of Burma oil comes to the District in bulk and this is the cheapest variety. Tobacco, which is practically all unmanufactured, shows a decline from 37,000 maunds, value Rs. 3·99 lakhs in 1904 to 29,000 maunds, value Rs. 2·79 lakhs in 1906. 35,000 maunds of the value of Rs. 3·78 lakhs are the average annual import of gunny bags. Betel nuts, potatoes and red ochre are also imported; potatoes come from Nainitāl and red ochre from Gwalior. There is a considerable trade in aniline dyes and

synthetic indigo has begun to find a market in the past few years. Transparent glass bangles from Austria are also brought in large numbers, and are generally worn in towns in preference to the country bangles.

Railway Stations. 210. The following table shows the exports and imports of each railway station :—

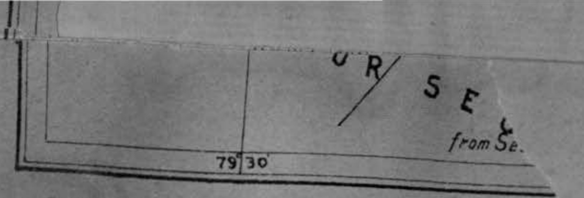
Exports by Stations in actual maunds.

Names of Stations.	1904	1905	1906	1907
	Maunds.	Maunds.	Maunds.	Maunds.
Katnī-Murwārā	1,548,300	1,503,300	1,600,600	1,826,100
Jubbulpore	1,021,300	716,000	854,300	944,600
Sihorā	365,000	141,500	176,300	311,700
Rupaund	251,500	241,900	207,400	229,800
Sleemanābād	174,500	156,100	169,000	217,700
Shahpurā	190,000	103,800	145,600	114,500
Niwār	13,300	96,500	161,600	117,900
Katangī	......	32,400	33,100	56,400
Deorī	90,600	6,600	16,000	30,600
Bargī...	2,100	3,400	38,400	60,200
Shikāra	......	1,500	6,000	11,800
Sukri	......	400	10,800	5,200
Gwārighāt	......	......	900	600
Total...	3,656,600	3,003,400	3,420,000	3,927,100

Imports by Stations in actual maunds.

Names of Stations.	1904	1905	1906	1907
	Maunds.	Maunds.	Maunds.	Maunds.
Jubbulpore	1,878,400	1,885,300	2,321,200	2,580,600
Katnī-Murwāra	1,165,400	1,357,800	1,408,600	1,006,200
Sihorā	77,200	105,600	77,500	70,000
Deori	28,800	35,300	28,600	25,900
Shahpurā	17,600	15,700	13,600	16,300
Sleemanābād	7,600	6,400	4,000	7,100
Bargī	3,800	17,200	400	2,200
Gwārighāt	...	5,400	16,100	7,400
Sukri	...	...	300	1,700
Rupaund	1,300	1,900	2,200	2,300
Shikāra	...	900	900	400
Katangī	...	...	...	300
Niwār...	900	800	200	300
Total ..	3,181,000	3,432,300	3,873,600	4,320,700

Katni-Murwāra and Jubbulpore are the leading stations for export. The exports from Katnī rose from 1,548,000 maunds in 1904 to 1,600,000 maunds in 1906 and to 1,826,000 maunds in 1907 and represent 46 per cent. of the total District exports on an average. Katni is said to be the largest export station next to Cawnpore on the East Indian Railway, and receives produce from Rewah, Pannā, Maihar, and other neighbouring Native States. Jubbulpore records an export of 1,021,000 maunds in 1904 and of 945,000 maunds in 1907 and despatches on an average 884,000 maunds or 25 per cent. of the total District exports every year. The third station is Sihorā with an average export of 249,000 maunds or 7 per cent., wheat being principally sent out from Sihorā and Jubbulpore. Rupaund on the Katnī-Bilāspur branch sends out 233,000 maunds or $6\frac{1}{2}$ per cent., while Sleemanābād, Shahpurā, and Niwār export only 5, 4 and 3 per cent., respectively. The remaining stations, *viz.*, Deorī, Bargī, Katangī, Shikāra, Sukri and Gwārighāt are insignificant, the exports from all these stations taking together amounting to but $3\frac{1}{2}$ per cent. of the total bulk. In respect of import the prominent stations are those of Jubbulpore and Katnī with an average of 2,166,000 and 1,384,000 maunds or $58\frac{1}{2}$ and $37\frac{1}{2}$ per cent. respectively of the total bulk. Imports into both of these stations have steadily increased during the four years 1904 to 1907. Jubbulpore shows 1,878,000 maunds in 1904, 2,321,000 maunds in 1906 and 2,581,000 in 1907. In Katnī 1,165,000 maunds recorded in 1904 went up to 1,409,000 maunds in 1906 and 1,606,000 maunds in 1907. Next comes Sihorā which gives an average import of 83,000 maunds or only 2 per cent. of the District import. Of the remaining stations whose combined imports amount to 2 per cent. of the District total those which may be said to be of any importance are Deorī and Shahpurā with an average annual import of 30,000 and 16,000 maunds respectively. The firm of Ralli Brothers deals in oilseeds, wheat and hides and has most of the export trade. The rest of the traffic is managed by Bhātias from Bombay and Cutchi Muhammadans ; these as a rule are men of small capital. Mārwāris only act as local brokers and do not export grain by rail. A Khojā agent of Graham & Co. does the whole trade in kerosine oil.



Reg. No. 1379 E., 09.—V.—455.

COMMUNICATIONS.

Railways.

211. At the 30 years' settlement the District was quite devoid of railway communication although the construction of the East Indian Railway had been taken in hand. Since then no less than three systems with their branches have been opened and the District has been revolutionized, the greatest stimulus being given to its trade. The East Indian Railway brought Jubbulpore into connection with Calcutta in 1867 and three years later the opening of the Great Indian Peninsula Railway to Bombay placed Jubbulpore on the main line from Bombay to Calcutta. The East Indian Railway runs from Jubbulpore which is a junction to the north-east crossing the Jubbulpore, Sihorā and Murwāra tahsils and after traversing the District for 67½ miles leaves it 10½ miles beyond Katnī station. Its route follows closely that of the Mirzāpur road. Besides Jubbulpore the stations on this line are Deori, Sihorā, Sleemanābād, Niwār and Katnī. The Great Indian Peninsula Railway from Bombay after running for 25½ miles in the District has its terminus at Jubbulpore. It has three other stations, Shahpurā, Mīrganj, and Madan-Mahal, all of which lie in the Jubbulpore tahsīl. Jubbulpore is by this route 676 miles from Bombay and 733 miles from Calcutta. In 1891 the distance to Calcutta was reduced to 643 miles by the construction of a branch of the Bengal-Nāgpur Railway from Katnī eastward to Bilāspur. This line runs for 22½ miles through the south-east of the Murwāra tahsīl with stations at Katangī and Rupaund. The Murwāra tahsīl was still further opened out in 1899 by the construction of the Katnī-Bina branch of the Indian Midland section of the Great Indian Peninsula Railway which connects Katnī with Bina *via* Damoh and Saugor. It runs for 34 miles westward through the tahsil with stations at Hardua, Rīthi and Salaiyā and leaves the District about a mile beyond Salaiyā. A recent addition to the communications of the District has been the Sātpurā branch of the [illegible]al-Nāgpur Railway with a 2'-6" gauge which runs [illegible]h and connects with the main line *via* Neinpur at G[illegible]. The line which was opened in 1905 follows that of the Jubbulpore-Seoni road very closely and runs for 29 miles in the Jubbulpore tahsil with stations at How-

bāgh, Gwārighāt, Bargī, and Sukri besides the Jubbulpore junction. The Nerbudda is crossed by a very fine bridge. The total length of the railway line in the District now amounts to 178½ miles of which 67½ belong to the East Indian Railway, 59½ to the Great Indian Peninsula Railway (including the Indian Midland Railway section) and 51½ to the Bengal-Nāgpur Railway.

Old road system.

212. At the 30 years' settlement the principal roads were those to Mirzāpur and Nāgpur, running north and south respectively. The next in importance was the western road (parallel to the Great Indian Peninsula Railway) towards the valley of the Nerbudda about 32 miles in length as far as the boundary of the District, of which about 8 miles were metalled, the rest being a *katchā* road with several broken down bridges and culverts almost impassable for carts between June and November and even later. Then came the military road to Saugor only half of which (*i.e.*, 20 out of 40 miles) up to the Hiran river was metalled and bridged. This too was closed to cart traffic from June to October. The road to Mandlā was a fair line as far as the boundary of the District. Among minor roads Mr. Russell makes mention of an eastern road to Sohāgpur, a western road *via* Pātan to Rehli (Saugor District), the portion of the Saugor-Damoh-Mirzāpur road falling within the District (some 20 miles) and the Sihorā-Katangi road. The Sohāgpur and Pātan roads were much frequented by traders employing bullock carriage while a good deal of grain was conveyed towards Saugor and Bhopāl *via* the Sihorā-Katangi road.

Present road system.

213. The development of the railway system was necessarily followed by a change in the scheme of road construction. The old trunk roads lost their value and the policy was adopted of constructing feeder roads to the railway and also roads useful for administrative purposes, bringing large towns, villages and grain centres into touch with the central markets. The District generally is now well provided with communications, those of the south being excellent. The Murwāra tahsil is perhaps the worst off for roads though its railway communications are good.

Jubbulpore itself is the starting point of most of the metalled roads of the District. The Jubbulpore-Mandlā road

which runs for 13 miles within the District is perhaps the most important of them but its importance will be considerably diminished by the opening of the proposed railway from Neinpur to Mandlā and its extension to Mungelī in the Bilāspur District. The road crosses the Gaur river, a tributary of the Nerbudda, at Goriaghāt and passes through Barelā where a large weekly bazar is held, a considerable quantity of grain being despatched thence to Jubbulpore. The Jubbulpore-Shahpurā-Dindori road *via* Kundam (the old Sohāgpur road) is only metalled for the first 12½ miles, the remainder to the border of the District being third class. Banjārās carry on a considerable traffic in grain, *harrā*, hemp, tilli and mahuā along this road by means of pack bullocks. An estimate has been prepared for raising the road in class up to Kundam, the intention being to take up short lengths each year. It is proposed to connect Baghrāji, a place of considerable repute and trade in the Sonpur pargana (tahsīl Jubbulpore), with Khamaria on this road, by a third-class road 18 miles long and a start has been made with the construction.

The old Military road to Saugor *via* Katangi and Damoh extending for 26 miles in the District, all metalled, has been deprived of much of its importance by the construction of the Katni-Bīna branch of the Indian Midland Railway section of the Great Indian Peninsula Railway, which has diverted the trade of Damoh from Jubbulpore. The Jubbulpore-Mirzāpur road has been superseded by the railway running parallel to it and is now maintained only for 15¼ miles as a first-class road, *i.e.*, 11¼ miles from Jubbulpore and 4 miles from Jhinjhri to Katnī. The important towns of Panāgar, Sihorā, Sleemanābād and Murwāra which all lie on the road, are linked up with the villages to the east and west by fair weather tracks and gravelled roads. The Jubbulpore-Nāgpur or Great Northern Road runs for 27 miles in the District and is metalled and bridged throughout except at the Nerbudda which it crosses at Gwārighāt about 5 miles from Jubbulpore. This road was once one of the most important roads in India, the mails from Bombay to Calcutta being carried by tongā from Nāgpur to Jubbulpore till 1870. It received its first blow when the Great Indian Peninsula and East India Railways were linked up by the line from Bhusāwal to Jubbulpore.

It still continued to serve a large local traffic of grain and timber from the Seonī District, but in 1905 the opening of the Gondia-Jubbulpore extension of the Sātpurā branch of the Bengal-Nāgpur Railway still further affected its utility. A similar fate befell the old Bombay Road which formerly had a considerable trade in cotton when it was policed at regular intervals and provided with rest-houses at every place of consequence. The Great Indian Peninsula Railway now runs parallel to it and absorbs most of the traffic. The road is maintained as a first-class road only for 12½ miles as far as Mīrganj. At the eleventh mile it is connected with the Marble Rocks on the one side and with the Mīrganj railway station on the other by short metalled roads 4 and 1 mile in length respectively. Other metalled roads in the District are the Rānitāl-Garhā road (2½ miles), the link road from the Sadar Bazar to the Mandlā road (1½ miles) and short feeders to the railway stations of Katnī-Murwāra, Panāgar-Deori, Shahpurā, Sihorā, Sleemanābād, Bargī and Sukrī, the total mileage of these feeders being 5 miles.

The most important of the gravelled roads are the Jubbulpore-Pātan road (18 miles) which is to be metalled to attract the trade from Pātan, the second largest country town in the District and the seat of a large bazar where a considerable amount of trade is carried on; the Panāgar-Singaldīp-Majholi road, 18 miles in length, connecting Panāgar railway station with the important market of Majholi on the Sihorā-Singrāmpur road; the Sihorā-Majholi-Katao-Singrāmpur road which runs for 20 miles in the District; the Sihorā Khitolā-Silondi road (24½ miles), along which Silondi exports quantities of til, mustard, lac and *harrā* to the railway station at Sihorā; the Sihorā-Umaria-Dhīmarkherā (20 miles), the principal place on which is Umaria where a large business is done in grain, wood and bamboos which are brought here from the neighbouring jungle villages and also in *pān* which is exported by rail even to the United Provinces; and the Sihorā-Bahurīband road which runs to Salaiyā railway station. A third-class road 13 miles in length also connects Sleemanābād with Bahurīband, and Umaria is connected with Sleemanābād railway station by 9 miles of gravelled road. At Chāka a gravelled road, 16 miles in

length runs to Bijerāghogarh while a third-class road 29 miles in length connects Barhī, an important bazar, with Murwāra passing through Chhaparwāh, Harrawāh, Katangī and Baderā. To improve the communications of the Murwāra tahsīl it is proposed to realign and improve the old tracks from Murwāra to Bargaon in the western corner of the tahsīl and from Bijerāghogarh to Chandia *via* Barhī and a certain amount of work has already been done. The Murwāra-Bargaon road will be 27 miles and the Bijerāghogarh-Chandia road 30 miles in length.

Total length and cost of construction and maintenance.

214. The total length of the metalled roads in the District is 113 miles and of unmetalled roads 301 miles. The Public Works Department look after 110 miles of metalled and an equal length of unmetalled roads while the remainder are in charge of the District Council. The construction of metalled roads and unmetalled roads cost the Public Works Department 10·87 and 4·10 lakhs respectively. No such figures are available for the District Council roads. The Public Works Department spend Rs. 46,000 on maintaining metalled roads and Rs. 14,000 on unmetalled roads while similar figures for roads under the District Council are Rs. 375 and Rs. 10,000 respectively. In addition the District Council maintains 320 miles of village tracks on which they spend Rs. 1,325 yearly or a little over Rs. 4 per mile.

CHAPTER VII.

FORESTS AND MINERALS.

Forests.

215. Forest conservancy was first undertaken in this District in the year 1867, when three forest blocks in the eastern portion of the present Murwāra range (Nos. 17, 18 and 20) were demarcated and formally reserved. Before this period, in 1862, these forests were worked for supplying sleepers of *sāl*, *sāj*, *kohā* and *rohin*, to the East Indian Railway. In 1871 these forests were closed to all cutting and grazing. The remaining Government forests of the District were placed under the control of the Deputy Commissioner on the passing of the Forest Act VII of 1865 and were administered by him, the reserved forests from 1863 forming part of the Northern Division which included all the reserved forests in the Mandlā, Jubbulpore, Damoh and Saugor Districts. Up to 1887 the reserves were closed to fellings by outsiders, but several thousand dead and dying *sāl* trees were extracted by departmental agency and sold for mine props to the Umaria colliery. After the passing of the Indian Forest Act VII of 1878 the unreserved forests were declared reserved forests, but continued to be leased out to annual farmers who were allowed to cut any tree in any way they liked with the exception of some prohibited species, such as teak, *sāl*, mahuā and *chār*, this being the system on which the forests were worked from 1865. In 1887 all the forests of the District together with the Singrāmpur reserve of Damoh, were constituted into a separate forest division under its present name, and were placed under the charge of a Forest Officer. Singrāmpur was detached in 1891 when the Damoh forest division was formed. In 1891 the Dhanwāhi range of the Mandlā division was, with a view to administrative convenience, transferred to this division, thus completing its present constitution. From this period the farming system was abolished and replaced by the license system, under

System of management.

which a person provided with a license could go into a forest named therein, and cut and remove the produce there under purchase. In 1893 systematic working in accordance with certain working plans was introduced, and since 1897 the prescriptions of a sanctioned working plan have been worked up to. About 36.5 per cent. of the total forest area of the division is now under regular fire protection.

Distribution.

216. The forests are, with a few exceptions, confined chiefly to the southern and eastern portions of the District. The blocks, as a rule, are neither compact nor extensive. Excepting the limited tract lying to the east of the Mahānadī, which is open country, the general character of the surface where the forests are situated, is hilly and rugged, the hills being usually flat topped, with steep, often precipitous, slopes. The Government forests occupy an area of 347 square miles in the Jubbulpore District divided into four ranges, besides an area of 173 square miles of Mandlā District, included, as mentioned above, in the Dhanwāhi range.

Character.

217. Owing to the various geological formations found in the District, the forests are not characterised by definite special types, or rather it may be said that all types are mixed together. This District is the northern limit of teak, and the Western limit of the Peninsular area of *sāl*. The forests however can still be roughly divided into four types. (1) *Sāl* forest, where *sāl* is found, occurring along the eastern portion of the District in the Murwāra and Sihorā ranges. Here *sāl* seldom attains more than 60 feet in height or 4 feet in girth. Indeed the majority of the trees have entered on the decline, and many are dead or in full decay, long before they obtain these sizes. Reproduction of the species is poor. (2) Teak forest, where teak is the dominant species. It is almost wholly confined to the hilly areas. The greater portion of the Jubbulpore range, the south-eastern portion of Sihorā, the southern portion of Bargī, and most of the forests in the Dhanwāhi range, are included in this type. Teak attains its largest dimensions and is most numerous on the trap areas, but even there it hardly reaches a height of over 60 feet or a girth of over 4 feet. Often before this girth is reached the trees become topsore and die off rapidly.

Reproduction of this species also is not satisfactory. (3) Mixed forest, with practically no teak. Such forests are by far the most widely distributed of the four types. The principal constituent species are *dhawā* (*Anogeissus latifolia*), *sejā* (*Lagerstrœmia parviflora*), *sāj* (*Terminalia tomentosa*), *khair* (*Acacia Catechu*), *ghot* (*Zizyphus xylopyra*), *salai* (*Boswellia serrata*), *tendū* (*Diospyros Melanoxylon*), *tinsā* (*Ougenia dalbergeoides*), *bīja* (*Pterocarpus Marsupium*), *chheolā* (*Butea frondosa*), *aonlā* (*Phyllanthus Emblica*), *gunjā* (*Odina Wodier*) and *achār* (*Buchanania latifolia*). Mahuā (*Bassia latifolia*) is found scattered everywhere. Numerous *harrā* trees (*Terminaliā chebula*) are met with on sandy soils and hilly ground. *Kohā* (*Terminalia Arjuna*) occurs in large numbers on the banks of streams. Teak also is present scattered, though altogether absent in a few blocks. On laterite and sandy soils the undergrowth consists principally of *sihāru* (*Nyctanthus Arbor-tristis*). Reproduction is very variable, being abundant wherever there is some depth of soil. (4) Bamboo forest. The only species found is *Dendrocalamus strictus*. It does not form pure forest, but runs through types (2) and (3).

Products.

218. Teak being the best timber in every respect is used principally for building and making furniture. *Sāj* is used for building, when teak is not available, and is cut during the rains, as slow seasoning in moist atmosphere increases its durability. *Dhawā*, *sejā*, *tendū*, *tinsā* and *aonlā* are used by the poorer classes for constructing their huts. Fire-wood is in great demand both in Jubbulpore and in Murwāra for lime manufacture. There is a large demand for charcoal in Jubbulpore. This town moreover is a large market for bamboos also. The revenue from the sale of timber amounted to Rs. 8900, from fire-wood Rs. 14,300 and bamboos Rs. 3600 during the year 1906-07.

Grazing.

219. About 97,000 animals grazed in the forests during 1906-07, from which a revenue of Rs. 19,300 was obtained. Practically all these animals are local, and none came from outside, that is, from adjoining Districts or States. About 7·3 per cent. of the total forest area is closed to grazing. The demand for grass in Jubbulpore is very large, not only for the civil popul-

ation but also for the Military Department, and the requirements of the cattle are likely to increase still further.

Minor products.

220. The chief minor products are lac, mahuā, *chār*, *tendū*, *harrā*, catechu, hide, gum, honey, wax and iron ore. The right of propagating and collecting lac is leased out either by ranges or by blocks for 3 to 5 years. The Murwāra range has been leased out to a contractor who is working a shellac factory at Murwāra. The industry is gradually extending. Mahuā, *chār* and *tendū* are leased out for collection every year at the time of their harvest and serve as food to the poorer classes. Mahuā is moreover used locally for distilling country liquor, and is also exported in large quantities for the same purpose. *Harrā* is similarly leased out and is collected for export to be used for tanning purposes. The collection of hides of animals dying in the forests is leased to Chamārs annually. Gum, honey and wax are also leased out annually by blocks. Iron-ore mines are either leased out for fixed periods, or the ore is extracted under a commutation license. The largest lessee at present is the firm of Olpherts, which carries on the Paint Works at Murwāra. Catechu is extracted by boiling the heart wood of *khair* through the medium of professional Khairwās, who come annually from Pannā State. They take the lease of *khair* trees over certain forest areas annually at Rs. 2 per *handī* (earthen pot) for the season, which may commence at any time after November and extend till June. The revenue from minor products during 1906-07 was Rs. 3,400.

Statistics of revenue and forest staff.

221. The annual revenue was Rs. 16,700 in 1886-87, Rs. 29,000 in 1896-97 and Rs. 52,100 in 1906-07. This steady increase occurred under all the three principal sources of revenue, *viz.*, timber, fire-wood and grazing. The expenditure for the corresponding years was Rs. 5000, Rs. 44,000 and Rs. 39,000 respectively. The increase in the second decade is natural owing to the appointment of a more numerous and better paid staff and the expansion of works for protection and improvement of the forests. The decrease in the third decade is due solely to the transfer of some higher paid officials from the division. The establishment at present consists of an Extra Assistant Conservator

(who may be replaced by a Deputy Conservator when available) in charge of the division, 3 Rangers, 2 Deputy Rangers, 8 Foresters, and 76 permanent, and 26 temporary forest guards.

Arboriculture.

222. Jubbulpore has always been famous for its groves and avenues. Sir William Sleeman in his 'Rambles and Recollections' states that two-thirds of the towns and villages of this District were embedded in fine groves of mango and tamarind mixed with the banyan and the pīpal; he estimated their number at 3000, the whole of which had been planted under native rule, and he pays an eloquent tribute to the public spirit of the Hindus in this connection. Sir William Sleeman himself planted an avenue along the road from Maihar to Jubbulpore in 1829 and 1830, and another 86 miles in length from Gwārighāt on the Nerbudda to Chāka. The trees planted were banyan, pīpal, mango, tamarind and *jāmun*. The practice of planting avenues of this description was in earlier days as much a feature of British Administration as the construction of the roads themselves, and the maintenance of the avenues so planted was looked upon as one of the most important duties of the District Officer. Tree-planting was a much simpler business then than at present. The work at headquarters was light and the District officer more or less looked upon his District as his own estate and the inhabitants thereof as his own people. The planting work was done through and by the local village authorities. Under such conditions were planted the fine avenues which still remain as stately memorials of bygone generations of District officials. In later days the work of tree-planting failed to retain its place; railways and roads increased, officials were overburdened with a variety of other duties, and, though a certain allotment was made for arboriculture, the keen personal interest which could alone make the expenditure successful was lacking. Moreover, with the development of trade native landowners concentrated all their energies on cultivation and the practice of planting groves fell into desuetude.

In recent years there has been a revival of interest in tree-planting. Efforts are made from time to time to interest native landowners in the planting of groves but the utilitarian

spirit is abroad and not much success has been achieved. So far as official action is concerned the planting and maintenance of roadside avenues has been placed on a more satisfactory footing. Progress is however necessarily slow for lack of funds.

Of a length of 214 miles on 14 roads in charge of the Public Works Department about 110 miles are provided with established avenues, of which about 19 miles planted with young trees are under maintenance. About 23 miles of the roads do not require planting as they pass through forests. Thus 81 miles remain to be provided with avenues. The Jubbulpore-Mirzāpur, the Jubbulpore-Damoh, the Jubbulpore-Marble Rocks, the Shahpurā-Pātan, the Mirganj-Shahpurā and the Jubbulpore-Pātan-Tendukherā roads have avenues practically for the whole of their lengths within the District, while the Great Northern, the Jubbulpore-Mandlā and the Jubbulpore-Kundam roads have avenues for 10, 7 and 8½ miles out of their total lengths of 27, 14 and 38 miles respectively. No new trees were planted during the years 1904-05, 1905-06 and 1906-07 but those planted previous to these years were being maintained at a cost of Rs. 1138. The Provincial grant for these operations was Rs. 2221 in 1906-07. A sum of Rs. 288 was realized from the sale of mangoes and lac in 1906-07. No nursery is kept up by the Public Works Department on any of its roads.

Arboricultural operations are also carried on by the District Council on roads in their charge and a scheme has been drawn up for the eight years ending March 1915 involving an annual expenditure of Rs. 1225. Of the 12 roads maintained by the District Council out of an aggregate length of about 199 miles some 185 miles are suitable for avenues. At present avenues either established or under maintenance exist on 67½ miles of this length, the Jubbulpore-Mirzāpur road having 50 miles, the Khitolā-Silondi road 6 and the Sleemanābād feeder and Khitolā-Dhimarkherā roads 3 each. The District Council maintains a nursery of its own at Sihorā and pays an annual contribution of Rs. 150 to the Jubbulpore municipality towards the upkeep of its Rānitāl nursery from which the Council is supplied with young trees for planting out. The Council are at present engaged in maintaining about 13 miles of avenue, the plants being still young and

requiring protection. Original work will begin in 1911-12 when the Mirzāpur and Khitolā-Silondi roads will be taken in hand.

Jubbulpore is the only municipality which devotes much attention to arboriculture. Sihorā contains one mile of the Mirzāpur road but the trees thereon are established, while there are no roadside avenues in Murwāra. The Jubbulpore municipality has within its area 31 roads of short lengths of which a length of 20 miles is supplied with avenues, and 5 miles are being dealt with under a scheme. The work is being done systematically, and the climate favours the natural growth of trees. A municipal nursery is maintained at an annual cost of Rs. 500 on the Rānitāl road.

The roadside avenues differ considerably in picturesqueness and comfort, and this is well illustrated by the Jubbulpore-Mirzāpur and Jubbulpore-Damoh roads, of which Mr. R. S. Hole writes as follows:—'Along the whole length of the 'former there is a magnificent avenue of several kinds of 'umbrageous trees including mango, *jāmun*, pipal, *bar*, *kanji* 'and others; along the latter there are miles and miles of 'nothing but *babūl*. In the early spring it is bad enough 'when there is nothing to vary the monotonous green of the 'wheat fields on either side but the scanty blue green foliage 'and the dark stems of the *babūls*, but in the hot weather 'when the fields are bare and the road dusty and hot the de-'cided discomfort of the sun beating through the thin foliage 'is added to the monotony of colour. On the Mirzāpur 'road on the contrary travelling is comparatively comfortable 'even in the hot weather, and the pleasing contrast of the 'variously coloured foliage contributes in no small degree to 'this. The dark green foliage of *Pongamia glabra* is relieved 'by the pretty drooping racemes of white flowers, the pipal 'with its young leaves is a mass of delicate greens and reds 'contrasting with the darker colour of the adjoining mangoes. 'Each mango tree is a marvel of colour with the deep purple 'reds and light green of the young leaves, the dark full green 'of the mature foliage and the yellows of the old leaves about 'to fall. The *bar* is covered with its clusters of pinkish 'fruits and large dark green ivory veined leaves and lastly 'the *jāmun* with its light coloured pinkish bark and dense 'crown gives probably the best shade of any roadside tree.'

MINERALS.

223. There is perhaps no other District in the Central Provinces with as great a variety of mineral substances of possible economic value as the Jubbulpore District. And at various times a considerable amount of attention has been devoted to testing the value of these minerals, particularly the iron, manganese, and copper. But up to the present little success has been obtained. The only minerals the working of which has been put on a firm footing are the limestone of Katnī, the fuller's earth of the same area, the ochre of Jauli, and the pottery clays of Jubbulpore. Nevertheless, small amounts of steatite and barytes have been exported, and during 1907 7100 tons of manganese-ore were extracted at Mansakrā, and 5,000 tons carted to Sihorā station, but not despatched. There is also a small native iron industry, which keeps a considerable number of furnaces at work in various parts of the District.

List of mineral products.

The following is a list of the minerals of economic value found in this District :—

1. Agate, Amethyst, Carnelian, Jasper, etc.
2. Aluminium-ore or Bauxite.
3. Building and Ornamental Stone.
4. Clays.
5. Coal.
6. Copper.
7. Gold.
8. Silver.
9. Lead.
10. Barytes.
11. Dolomite.
12. Felspar.
13. Fluor-spar.
14. Iron.
15. Limestone.
16. Manganese.
17. Ochre.
18. Quartz.
19. Road Metal.
20. Soapstone.

224. *Agate, Amethyst, Carnelian, Jasper, &c.*—In the bed of the Nerbudda at Bherāghāt (the Marble Rocks) and other places, many of the pebbles consist of geodes derived from the Deccan Trap formation. They comprise all the varieties of chalcedony and jasper, such as agate, moss-agate, carnelian, onyx, heliotrope, as well as rock crystal and amethyst. These are collected by the local lapidaries and cut and polish-

Valuable stones.

ed into ornamental articles of considerable value, varying in size from beads and buttons to brooches, paper-knives, and paper-weights. The skill of these men is considerable, and the polish imparted to the agates is as high as the best European workmen are capable of, even with the aid of machinery. The chief abrasive materials used are the corundum of Piprā in Rewah, and agate powder.

Aluminium.

225. *Aluminium-ore or Bauxite.*—The existence of this substance in the hills south of Katnī was first noted by Mallet in 1883,[1] but he did not regard it as bauxite or aluminium-ore, but merely as an aluminous flux for iron-smelting. During 1904 both Mr. (now Sir) T. H. Holland, Director of the Geological Survey, and Mr. P. C. Dutt of Jubbulpore, seem to have seen the possibility that the aluminous laterites of Katnī were bauxites.

Analyses proved, not only that this was the case,[2] but also that the bauxite was very high-grade, and Mr. Dutt obtained a concession to work bauxite in this area. He has now succeeded in making pure alum from the bauxite of Tikuria near Katnī.

Building and Ornamental Stone.[3]

226. The chief rocks available in this District for use as building stones are laterite, in the country round Katnī, the Deccan Trap basalts (used in the construction of the Nerbudda bridge at Gwārighāt), the sandstones of the Jubbulpore group (quarried at Jubbulpore), the sandstones of the Upper Bhānrer division of the Vindhyans, the mica-schists of the Dhārwār formation, and the granites found near Jubbulpore. For ornamental purposes the dolomitic marbles of Bherāghāt are specially suited, whilst the Katnī limestone takes a good polish and might be used as a dark-grey marble, but is ordinarily used for lime-burning. The agates and allied substances have already been mentioned.

Clays and Coal.

227. *Clays.*—The clays found in this District are suitable for many purposes. The alluvial clays are used for brick-making, the

[1] *Rec., G. S. I.*, XVI, page 113.

[2] T. H. Holland, *Rec., G. S. I.*, XXXII, page 179, (1905).

[3] V. Ball, *Rec. G. S. I.*, VII, pp. 107, 109, 110, 118, (1874).

clays in the Jubbulpore formation are used at Jubbulpore in Burn & Co.'s Pottery works, and in those of rival pottery makers, whilst clays of Lower Vindhyan age near Katni are used as fuller's earth. Mallet tested the clays of the Jubbulpore group for their suitability for use as fireclays, and came to the conclusion that they would make good firebricks, especially if the clay were washed.[1] The only statistics that are available relate to the output of the fuller's earth. They are as follows :—

Year.		Long tons.
1904	...	98
1905	...	170
1906	...	112

Coal.—Coal of inferior quality occurs in the Jubbulpore formation at Lametā Ghat,[2] some 9 miles W. S. W. of Jubbulpore, and has been used for brick-burning at Jubbulpore.

Copper, gold, silver and lead.

228. *Copper.*—The existence of copper-ores near Imalia in the neighbourhood of Sleemanābād was first detected by Mr. W.G. Olpherts in 1870.[3] But serious attention was not directed to these ores until about 1903, when Mr. P. C. Dutt of Jubbulpore started to open up the deposits. He soon found that the copper deposits were much more extensive than had at first been supposed ; and in 1904 he went into partnership with Messrs. Burn & Co. During the following years these deposits have been extensively developed and prospected by means of diamond drilling ; the results obtained up to date have not been as good as was hoped for, but the occurrences may still be found to be of considerable economic value. Mr. Dutt's work proved the existence of a series of metalliferous veins striking N. N. W. through dolomitic limestones of Dhārwār age ; the minerals found were ores of copper

[1] *Rec., G. S. I.*, XVI, page 114, (1883) ; XXII, pp. 140-143, (1889).
[2] Mallet, *Rec., G. S. I.*, XXII, pp. 146-7, (1889).
[3] T. W. H. Hughes, *Rec., G. S. I.*, III, p. 70, (1870).

with some lead-ore, and at times a considerable amount of silver and gold in the copper-ores, and of silver in the lead-ores.[1] The work of Messrs. Dutt and Burn & Co. has led to general prospecting for copper-ores in the surrounding country.

Gold.—This has been found in some of the copper-ores of Sleemanābād, in quantities up to as much as 15 dwts. per ton of ore. This would of course be recovered as a bye-product, should the copper-ores ever be worked

Silver.—This is found in both the copper and lead-ores of Sleemanābād. The tetrahedrite (copper-ore) of Imalia near Sleemanābād is particularly rich, often containing 100 to 200 ozs. of silver to the ton of ore. The lead-ore noticed below yielded 19 ozs. of silver per ton.

Lead.—The occurrence of galena with the copper-ores of Sleemanābād has been noticed above; but galena is also found in a low ridge of white quartzite at a point about ¾th mile S.S.E. of Sleemanābād village. The galena is but sparsely distributed in the rock, and was considered by Hughes to be of no value. A sample of the ore gave 19 ozs. 12 dwts. of silver to the ton.[2]

Barytes.

229. The occurrence of barytes in the copper lodes of Sleemanābād seems to have been first noticed by Mallet in 1879.[3] Mr. P. C. Dutt, in opening up these copper lodes in 1903, found that one of them in particular, which he called the Mallet lode, was characterized by an abundance of barytes, which formed a large pocket near the surface. Some 30 tons are said to have been sent to Calcutta for use in the paint industry, whilst prior to this the railway is said to have used some 5 to 10 wagon-loads of the mineral for railway ballast.

Dolomite, Felspar, and Fluor-spar.

230. *Dolomite.*—To satisfy[4] any demand for dolomite for metallurgical purposes in this District, or the surrounding country, should such ever arise, an ample supply could be obtained from many localities in the Dhārwār

[1] L. L. Fermor, *Rec., G. S. I.*, XXXIII, p. 62, (1906).

[2] T. W. H. Hughes, *Rec., G. S. I.*, III, pp. 70, 71, (1870).

[3] *Rec., G. S. I.*, XII, p. 100.

[4] F. R. Mallet, *Rec., G. S. I.*, XVI, p. 113, (1883).

area, such as at Bherāghāt, or near Sleemanābād; but it is to be hoped that the dolomite of other areas would be used before that of Bherāghāt, in order to leave untouched as long as possible the beautiful Marble Rocks.

Felspar.—Mallet[1] discusses the supplies of felspar available in this District for pottery purposes and gives as the best locality a point near Singrāmpur, 2 miles east of Silondi, which is some 20 miles E.N.E. of Jubbulpore as the crow flies. The felspar is in a coarse pegmatite.

Fluor-spar.—This mineral is of considerable value for metallurgical purposes; it is found in the quartz-porphyry veins of Sleemanābād, but not in sufficient quantity to be of any economic value.[2]

Iron.

231. The iron-ore resources of this District have been very fully dealt with by Mallet.[3] He says:—'From time immemorial the 'Jabalpur district has held an important place amongst those 'centres where the smelting of iron has been carried on in the 'native method. Plentiful ores, extensive jungles for the 'supply of charcoal, and proximity to thickly populated 'alluvial tracts of country, combined to give Jabalpur a 'commanding position in the old days, before railways had 'brought the native hearths into an unequal struggle with the 'blast-furnaces of England. Even now iron is made on 'what, from the native point of view, must be considered a 'large scale, numerous furnaces being scattered over the 'iron-bearing portions of the district.'

The iron-ores of value are found in the laterite, and the Dhārwār (called by him Bijāwar) formations. The ores are almost exclusively varieties of hematite and limonite, the former being especially characteristic of the Dhārwārs, and the latter of the laterite. Besides the ores found in the laterite and the Dhārwārs, there are some, found on the outcrops of the Dhārwārs, that have been formed by secondary replacement. They bear some resemblance to the ores found in the laterite, but yet are different, and can therefore be

1 *Rec., G. S. I.*, XXII, p. 143 and 144, (1889).

2 L. L. Fermor, *Rec., G. S. I.*, XXXIII, p. 62, (1906).

3 'On the Iron Ores, and Subsidiary Materials for the Manufacture of Iron, in the North-Eastern part of the Jubbulpore District;' *Rec., G.S.I.*, XVI., pp. 94-115, (1883)

distinguished under the name *lateritoid*. The lateritoid ores are found especially in the neighbourhood of Sihorā and Gosalpur.

Mallet deals with the different localities in detail. The chief localities for the Dhārwār ores are Agaria, Jauli, Partābpur, and Saroli, situated about 8 to 10 miles south-east of Sihorā. At two of these localities he estimates the existence of very large quantities of high-grade ore. Mr. E. P. Martin, and Prof. Henry Louis[1], who opened up several of the iron-ore deposits of the Jubbulpore District about the year 1903 on behalf of Sir Ernest Cassel, to see if it was possible to start an iron-smelting industry on modern lines in this area, came to a conclusion at variance with that of Mallet; namely, that nowhere in this District had there been found deposits of iron-ore that could be considered workable from the point of view of the modern iron-smelter, the quantities of ore revealed by the prospecting being very much less than Mallet believed to exist.

The lateritic ores, which are mainly pisolitic limonites, are found in the rock-laterite formation round Katnī, the chief localities being Bijori, Imalia, and the Kanhwāra Hills. Analyses of the Dhārwār ores are given in both Mallet's (pp. 97-103) and Martin and Louis' (pp. 20, 21) papers. Analyses of the lateritic ores are given by Mallet (pp. 105-111), and of the lateritoid ores of Mansakrā near Sihorā by Martin and Louis (p. 23).

Although the work of Martin and Louis seems to show that it would not be profitable to erect an iron-work in this District, owing to the comparatively small size of the deposits, and the fact that they are not all of the same class of ore, yet it is certain that these ores will all be of value in the future for export, either out of India, or to some other part of India where ironworks have been established.

A native iron industry of considerable dimensions continues, however, to flourish in the District, as for example at Jauli, where Dhārwār schistose hematites are smelted, and at Ghughrā east of Sihorā, where manganiferous iron-ore is smelted with the production of a superior brand of steely

[1] *Agricultural Ledger*, No. 3 of 1904.

iron, known locally as *kherī*. The number of furnaces at work, and tons of iron produced during 1906 and 1907, are shown below :—

	No. of furnaces.	Tons of iron produced.
1906	71	319
1907	47	106

232. The most important limestone in the District is the one belonging to the Rohtas stage of the Lower Vindhyans, and usually known as the Katnī limestone, because it is quarried extensively near that town for lime-burning. The distribution of this limestone is given by Mallet[1]; and an analysis by him shows only 1·79 per cent. of insoluble residue. Hence this limestone would be of value for metallurgical purposes as a flux as well as for lime-burning. For lime-burning it is quarried by Messrs. Cook & Sons, Dyer & Co., and others. The following shows the output of limestone since 1901 :—

Limestone.

Year.	Long tons.
1901	28,000
1902	30,091
1903	35,238
1904	49,847
1905	92,170
1906	47,836
1907	72,022

Mallet also says that an unlimited supply of limestone is obtainable from the Lametā formation.[2] An average sample taken near Jubbulpore showed 21·38 per cent. of insoluble residue.

233. The manganese-ores and manganiferous iron-ores of the neighbourhood of Sihorā and Gosalpur have attracted attention for many years, and have been noticed in turn by H. B.

Manganese.

[1] *Rec., G. S. I.*, XVI, pp. 111-112, (1883).

[2] *Loc. cit.*, p. 113.

Medlicott[1], F.R. Mallet[2], P.N. Bose[3], and E.P. Martin and H. Louis[4]. But they have never been proved to be of much economic value, at least for export purposes. Nevertheless, during 1907, Mr. Kellerschon, of the Carnegie Steel Company, extracted 7100 tons of pyrolusite at Mansakrā, of which 6000 tons showed the following analysis :—

Manganese	42·03
Iron	13·10
Silica	8·84
Phosphorus	0·182

The manganese-ores of this District occur in association with the Dhārwārs.[5] These rocks are chiefly quartzites, shales, slates, and hematite-schists banded with jaspery quartzite. The ores can be divided into two classes :—

1. Manganiferous iron-ore and psilomelane.
2. Pyrolusite.

The banded jasper-hematites have often been converted at the outcrop into large masses of manganiferous limonite, forming caps to the ridges in which these rocks occur. This manganiferous limonite is simply limonite veined with psilomelane, which in places forms large segregations. In other cases the hematite-schists have, by the development of little veins of manganese-ore, been converted at the outcrop into manganiferous hematite. In some cases this concentration of manganese takes place to such an extent that considerable quantities of nodular psilomelane have collected on the hematite outcrops. At the same time the accompanying jasper, slates, and phyllites have often been converted into manganese-ore by replacement. The pyrolusite usually occurs as nests and strings in the quartzites, and as nodular segregations in the lateritic dêbris often covering these rocks. As will be judged from the mode of occurrence and origin of these ores, they are not as a rule found in sufficient quantity at any one spot, nor of sufficiently uniform quality, to be of very much economic

[1] *Rec., G. S. I.*, XII, pp. 99-100, (1879).
[2] *Ibid*, pp. 99-100; XVI, 101-103, 116-118, (1883).
[3] *Rec., G. S. I.*, XXI, pp. 71-89, (1888); XXII, pp. 216-226, (1889).
[4] *Agricultural Ledger*, No. 3 of 1904, p. 23.
[5] L. L. Fermor, *Rec., G. S. I.*, XXXIII, p. 98, (1906); *Trans. Mining Geol. Inst. India*, I, p. 98, (1906).

value. Still Mr. Kellerschon has succeeded in obtaining a fair quantity of pyrolusite from Mansakrā (see page 262). All of these manganese-ores, except those mentioned as found in laterite, may be described as *lateritoid*, being similar in origin to the division of the iron-ores so named (see page 260).

234. A very high-grade quality of soft schistose hematite has been worked as red ochre for some years at Jauli by Messrs. Olpherts & Co., for the manufacture of 'Olpherts' Metallic Paint.' 400 tons of iron-ore are recorded as having been extracted at this locality in 1907 by Messrs. Olpherts & Co., presumably for this paint manufacture. Yellow ochre could probably be found in the laterite in the neighbourhood of Katnī.

Ochre.

235. *Quartz.*—Mallet enumerates the different varieties of silica found in this District that might be used in the manufacture of pottery and glass.[1] These comprise chalcedony from the Deccan Trap, chert from the Lametā limestones, vein quartz from the Dhārwārs and gneiss, and quartzose sandstone and derived quartz sand from the Jubbulpore division of the Gondwānas.

Other minerals.

Road Metal.—Many of the rocks found in this District are suitable for this purpose, but perhaps the most suitable are the basalts from the Deccan Trap formation, laterite, gneiss, and granite, and the dolomites, limestones and quartzites of the Dhārwār formation.

Soapstone.[2]—This mineral, otherwise known as steatite or talc, is found in irregular lenticular pockets intercalated between the dolomites of the Marble Rocks. It is of very good quality and has been worked in a small way for many years, the workings being let out every year to the highest bidder. In 1905, however, Mr. P. C. Dutt secured a prospecting license over it.

---

[1] *Rec., G. S. I.*, XXII., pp. 145-146, (1889).

[2] F. R. Mallet, *Rec., G. S. I.*, XXII, pp. 64, 144, (1889).

CHAPTER VIII.

FAMINE.

236. With regard to the early famines in the District there exists very little on record. It is stated that in 1818-19, the year after the cession of the District to British rule, a famine was caused by the failure of the autumn rains and by excessive rain during the following cold weather. Acute famine prevailed for seven months and was attended by much suffering and loss of life. Wheat sold at 4 seers per rupee. In 1832-33 severe distress was caused by exactly opposite conditions, excessive rainfall at the outset followed by a failure of rain. In 1833-34 owing to the failure of the autumn rain the spring crop area of the District was left practically unsown and the price of wheat reached 8 seers per rupee. The cultivators of Jubbulpore flocked into the city leaving their fields untilled. In 1854-55 rain fell continuously from October to the end of March and the spring crops were totally ruined by rust. The consequent distress which was felt not only in this District but in all the Districts of the Saugor and Nerbudda country is remembered to this day.

Early Famines.

237. The year 1868-69, memorable as that of the Bundelkhand famine[1], was one of severe drought and is the driest year in the whole of the rainfall history of the District, the total rainfall being 13·39 inches against an average of more than 50 inches. The *kharīf* crops were completely destroyed by drought but the *rabi* crops were partially saved by the copious rainfall towards the end of September. Acute distress was confined to the Murwāra tahsil, where with the help of Mr. W. G. Olpherts, the head of the railway colony at Murwāra, a complete system of relief was organized

Famine of 1868-69.

[1] Popularly known as Pachchisā meaning 25, that year being 1925 of the Vikrama era.

comprising works for the able-bodied and poor-houses for the infirm. The numbers relieved were between four and five thousand per diem. The mortality was heavy and left traces behind it for sometimes afterwards. During this famine the principle of the responsibility of the State for the life of its subjects was for the first time clearly enunciated, and District Officers were warned that they would be held personally answerable for all avoidable loss of life.

1877-78 and 1878-79.

238. In 1877-78 the rainfall was abnormal in its distribution; in many places it was unseasonable, and it was everywhere much below the average. The rice crop failed and the outturn of wheat was poor. High prices, however, generally compensated for any deficiency of yield. The year 1878-79 ranks as the next driest year after 1868-69, the rainfall being only 27·41 inches. But the monsoon fall was very well suited to the *kharīf* crops and had there been a good fall of rain in the end of December or the beginning of January the *rabi* harvest would have been a bumper one. Prices especially of the better kinds of grain ranged very high, but owing to the bumper *kharīf* crops food grains were obtainable everywhere and the poorer classes did not suffer much.

Cycle of bad years.

239. The cycle of bad years began from 1892-93. In this year the monsoon rainfall was abundant and the *kharīf* crops were generally good throughout. But heavy rainfall during January, February and March and the subsequent continued cloudy weather induced rust in wheat and linseed and the outturn of these crops was poor, being 60 and 45 per cent. of the normal respectively. In 1893-94 the rainfall in August and September was very heavy, being 18·64 and 14·32 inches respectively, and proved sufficient and beneficial. Prospects seemed favourable up to October, but heavy showers during this month and the succeeding month of November damaged both *kharīf* harvests and *rabi* sowings. The weather continued to be damp and cloudy during January, February and March, causing very serious damage to the wheat and linseed. The outturn of wheat was 30 and linseed 15 per cent. of the normal. It is stated that much of the capital sunk in seed grain was entirely lost. The combined outturn of the year was only 66 per cent. of the normal.

The year 1894-95 was the third and last of a cycle of three abnormally wet years in which injury was caused by excess rather than by deficiency of rain. In this year the rainfall was as untimely as it was excessive. The wheat crop, especially in the Havelī, was attacked by rust and the outturn was only 23 per cent. of the normal. Linseed was totally destroyed by the same disease. Gram suffered from caterpillars and *masūr* (*Ervum lens*) was almost ruined by a black blight. The combined outturn of all the crops was only 50 per cent. of the normal. The year was an exceptionally trying one to the agricultural classes and the labouring population passed through a period of great privation. Suspensions of about 3 lakhs of land revenue were given and the District Council spent Rs. 64,000 on road works.

With the year 1895-96 came a reversal of the situation; this was a year of drought and the burden of loss was shifted on to the poorer soils which bear the autumn food crops and hence on to the poorer cultivators. The monsoon of 1895 terminated abruptly in September and great damage ensued to the unirrigated rice and smaller millets. The combined outturn of all crops was only 47 per cent. of the normal. Some pressure began to be experienced and an influx of labourers from the Native States of Rewah and Bundelkhand added to the difficulties of the situation. Poor-houses were opened at Jubbulpore and Murwāra, some road and tank work was started at Murwāra, and the demand for employment was also met by the construction of the Saugor-Katni railway extension. By the end of May 1896 the numbers in relief exceeded 10,000 persons. The mortality was heavy in the Murwāra tahsīl where it rose from 35·10 per mille in 1895 to 69·48 per mille in 1896.

Famine of 1896-97.

240. The rainfall of June 1896 was quite satisfactory, being 14·14 inches, and July gave good rain with seasonable breaks, the total fall being 16·76 inches. In August a succession of cyclonic storms swept up giving plentiful rain, the rainfall during this month being 28·51 inches. Then a break occurred in the beginning of September which was most welcome in Jubbulpore. In the first week of September there were some insignificant showers; the second week passed without rain and some anxiety began to be felt.

During the whole of September the rainfall registered was only 62 cents which was very local and partial, and as October went by without rain it became clear that famine was imminent in those parts which had already suffered most in the past. With a rainless October, a hot sun, and dry west winds, the condition of the autumn crop daily deteriorated, while the ground rapidly hardened to such an extent that sowing of spring crops became impossible except in low lying places or in soils specially retentive of moisture. The rain which fell at the close of November was too late to enable much additional land to be sown and the great diminution in the areas placed under spring crops largely discounted the benefit which that rain and subsequent showers in December and January conferred on the *rabi* areas. The area under *rabi* crops in 1894-95 was 629,892 acres; it had fallen in 1895-96 to 455,994, while in 1896-97 it further fell to 412,218 acres. The yield of *rabi* crops was good but it failed to counterbalance the losses sustained by the autumn crops from the drought of September and October. The outturn of rice was 38 per cent. and kodon-kutkī 23 per cent. of the normal. Til was also 23 per cent. while juār was 68 per cent. of the normal. Of the *rabi* crops wheat was 105 per cent., linseed 120 per cent., and gram 90 per cent. of the normal. The combined outturn of all the crops was only 49 per cent. of the normal against 47 per cent. in 1895-96. As the District had been suffering from two previous bad harvests this fresh calamity told greatly upon the poorer classes, and severe distress and scarcity prevailed. The feeling of disquietude which was caused by the break in the rains in September developed into a panic in October and prices went up with a bound. In October a scheme of relief works was ordered to be drawn up and by the middle of December regular relief works were in operation.

Public Works Department Relief.

241. Famine relief operations were started early in December 1896 and closed by the middle of November 1897. There were in all 20 relief charges, the average distance between any two of these charges being 11 miles. Labour was principally employed in raising existing roads in class, the only new roads undertaken being the Pātan-Tendukherā and Piprod-Niwār roads. Metal was also

collected for repairs to the Great Northern road which connects Jubbulpore and Nāgpur. The works were all carried out by the Public Works Department with the exception of the Sihorā-Khamtarā and Sihorā-Salaiyā roads which were handed over to the Civil Department about the middle of August 1897. The total length of road work carried out by famine labour was 144 miles. The average daily attendance on each charge was over 2,000 or nearly 1 out of every 18 of the population residing within the area served. The total number of day units relieved from the commencement to the close of operations was over 8½ millions and the total expenditure including all charges over 7½ lakhs of rupees. The highest number of persons on these works was 41,298 on 31st May 1897 and from that date there was a gradual decrease till the operations were finally closed.

Local works and other forms of relief.

242. Local works were first opened in connection with the relief centres to provide for applicants for relief who were fit for light work; they were also started to provide for outlying tracts which the Public Works Department works did not fully reach; and in Jubbulpore city much work was done by the Municipality with funds provided by Government on various local improvements. Outside the Municipality the works were under the Circle Relief Officers and chiefly consisted of repairs to tanks. During the hot weather the numbers averaged about 15,000. On the advent of the rains most of the works were closed, but with the drought that followed some were re-opened and the numbers which had dropped to 5,000 rose again to 10,000. During the rains some short lengths of road chiefly in the Murwāra tahsil were constructed under this system. All works were finally closed in December 1897. The maximum number of persons on this form of relief was 21,928 on 31st January 1897.

Loan works were also undertaken and the sum of Rs. 85,265 was distributed in this connection principally for field embankments. It is estimated that work was thus provided for 8,000 people for about 3 months.

In Jubbulpore no weaver relief was started, but an advance of Rs. 2,188 was given through the Forest Department to iron smelters numbering with their families some 3000

persons. The advance was utilized for the manufacture of tools for famine works.

The construction of the Saugor-Katnī extension afforded considerable employment for able-bodied labourers in the Murwāra tahsīl during the whole of the famine period. The numbers on this work ranged between 2000 and 6000.

Poor-house relief at the cost of public funds had been established in the District during the hot weather and the rains of 1896 and these were at first crowded by starving wanderers largely drawn from the adjoining Native States. Altogether 5 poor-houses were opened in the District and the maximum number of persons using them was 4164 on January 31st, 1897, before the foreigners had been deported.

Village relief began to be distributed from January, and by May 31st the numbers so relieved stood at 18,418 persons. In June the numbers fell, but during the monsoon some further extension was necessary and the highest figure was reached on August 15th, when 33,519 persons were in receipt of the relief. Payments were made daily by mukaddams during the open season and weekly in the rains from advances received by them.

Nineteen relief centres were opened and the number of persons who flocked to them became for a time unmanageably large (39,581 in the middle of January). As local works were organized and drafts made to works under the Public Works Department or to village relief, several of these centres were gradually closed and the numbers steadily fell from 18,000 in the middle of February to 5300 in the middle of May. Ultimately only 9 were retained as combined hospitals and kitchens and proved of great utility. For the management of the original centres patwāris and school-masters were the agency utilized under the supervision of the Circle Relief Officers; but the combined rural hospitals and kitchens which succeeded them were each managed by a Hospital Assistant. The numbers relieved at these institutions fluctuated between 2000 and 3000 during the months of June and July, after which they were supplemented by the establishment of kitchens. Altogether 59 children's kitchens were opened, the majority in August, and they were continued till the close of the famine generally, reaching their maximum numbers in September just before the reaping of the autumn crops.

Relief measures of all kinds lasted from October 1896 to December 1897. The highest number of persons on all forms of relief was 96,862 or 12·95 per cent. of the population of the District. The total expenditure on famine relief was Rs. 18,93,024 and the total incidence per unit was 0-1-3. The total number of day units relieved was 24,230,707. Rs. 3,23,663 on account of the demand for land revenue and cesses were suspended and Rs. 5,64,251 on account of the outstanding arrears were remitted. Rs. 1,76,657 were advanced as *takāvi* loans for seed grain and Rs. 4,25,424 were distributed from Charitable grants. The part played by Missions throughout the famine proved a valuable accessory to the Government relief. The American Methodist Episcopalian Mission of Jubbulpore did a great work in distributing a large cargo of grain received from America, besides succouring a number of orphans of both sexes.

Mortality and prices.

243. The mortality for the year 1897 for the whole District was 72·15 per mille as against 63·16 in 1896. In January the death-rate was 7·76, February 9·14, March 7·07 and for the rest of the year it ranged between 5 and 6 per mille per mensem. An influx of starving wanderers in an emaciated condition from neighbouring States helped to swell the mortality at the beginning of the year. Of 3240 deaths which occurred in the poor-houses between January and June 1897, only 1,682 were of residents of the Central Provinces. It was found advisable to deport a large number of aliens to the States from which they came under arrangements made with the Political Agent. The price of wheat as already stated rose in September to 10 seers from 12 seers in August 1896. In December it rose to 8·8 seers per rupee. During 1897 it ranged between 9 and 10 seers per rupee; the average price for the year being 9·5 seers per rupee. The price of juār was 13·6 and rice 9·2 seers per rupee.

The years 1897-98 and 1898-99.

244. The *kharīf* harvest of 1897-98 was satisfactory and amply replenished the food stocks of the District. The *rabi* crop also was good, though the area sown was far below normal. The combined outturn of all crops was 92 per cent. of normal. The season of 1898-99 was somewhat disappointing except for the rice and small millets

grown on light soils and the combined outturn was 70 per cent. of the normal. In spite of the fairly good harvest of these two years the condition of the cultivator at the end of 1898 was far from satisfactory, the long series of calamities having greatly impoverished the District.

Famine of 1899-1900.

245. The year 1899-1900 had a rainfall of only 33·43 inches, about 21 inches of which fell before the close of July. There were 7·71 inches in August and 2·12 inches at the commencement of September. The fall was quite inadequate for the rice crop which at an early stage began to wither ; kodon and juār, the other chief food crops, were afterwards ruined by the drought. All over the District rice gave no outturn and kodon was not more than 15 per cent. and juār 35 per cent. of the normal. To the loss of *kharīf* had to be added an exceedingly bad *rabi*. Owing to the absence of rain in September and October much of the land was too dry for sowing and only about two-thirds of the previous year's area was sown. In the Haveli the fields were never flooded and only in some of the eastern parts of Sihorā did the crops attain to more than half the normal. Murwāra was benefitted by the heavy rain of January 1900 as the *rabi* was less advanced there than in the south of the District, but the area sown was very limited. The outturn of wheat was 50 per cent., gram 60 per cent., and linseed 15 per cent. of the normal. The combined outturn of all crops for both seasons was only one quarter of the normal. The conditions of this famine differed from those of 1896-97 in that in the present year both harvests were severely affected whereas in the former the District reaped an excellent *rabi*. But 1896-97 found the District suffering from the series of scarcities of the preceding years whereas the good *kharīf* harvests of 1897-98 and 1898-99 had renewed stocks and had made the cultivators better able to bear up against this fresh calamity. Except the better part of the Jubbulpore and Sihorā-Haveli—and even there some relief had to be given in the rains—the whole of the District was now affected. Early in September 1899 it was found necessary to give village relief to a few villages in the extreme south-west of the District which had not altogether recovered from the effects of the previous bad years. This was gradually extended as September and

October passed without rain. It was not considered advisable to open large relief works under the Public Works Department until the beginning of November.

Public Works Department works.

246. Two relief camps were opened in quick succession in November and three more by the third week of January when the daily attendance rose to a maximum of 24,000. It was not until about the last week of July that the workers began returning to their villages in large numbers. Two of the works were closed in July and the last in October 1900. The daily attendance per charge averaged 2,900. The average attendance for the whole District was a little under 11,000. The labour was chiefly employed on roads and village tanks and also to some extent on a few small irrigation reservoirs and the collection of ballast for the East Indian Railway. The works carried out were a new road from Panāgar to Singaldīp (10 miles) which was banked and *muramed* throughout and connected with the railway. The town of Sleemanābād connected with the railway (7 miles). Four important roads were improved, *viz.*, Sihorā-Salaiyā, Kundam-Shahpurā, Umaria-Dhīmarkherā, and Salaiyā to Umaria. 29 old village tanks were deepened and otherwise improved and four small irrigation tanks were constructed, *viz.*, one at Darshani, two at Semāpatti and one at Panāgar. A sum of Rs. 2·11 lakhs was expended on direct relief and the total expenditure including incidental charges amounted to Rs. 2·99 lakhs.

Other relief works and relief measures.

247. The most severely distressed portion of the District—the Murwāra tahsil—was relieved entirely by village works, and the system of admission by tickets was adopted with considerable success. Village works were also undertaken in the east of Sihorā tahsīl. Seven tank works were opened during December 1899. The work gradually increased and by the end of May, 31 existed with a maximum number of 23,577 persons on relief. Thenceforward the number of works gradually decreased till the last was closed in September 1900. Under this system of relief 13 new tanks were constructed, 54 old tanks (including 4 tanks undertaken by mālguzārs) were restored or improved; work was done on 6 roads, and in 46 cases fields were embanked. A forest

work was also opened by the Forest Department. This consisted of felling a large piece of forest for firewood for the Murwāra lime kilns and some 900 people were employed on the work for 2 or 3 months. The work was discontinued when the financial results were found to be unsatisfactory. Grass cutting operations were undertaken departmentally by the Forest Department in the cold weather, and gave employment to a considerable number of labourers. About 550 tons of grass cut in this way were sold at a low price or given free to cultivators.

In some of the worst affected parts of the Murwāra tahsīl after the closing of the village works at the beginning of the rains it was considered advisable to continue relief to the workers in their own villages, repairs to embankments and weeding of fields being the two forms of labour on which they were mostly employed. The highest number in this form of relief was 2,890 in the first half of August.

No poor-houses or pauper works were opened. Village relief as already stated was started early in September in some villages in the extreme south-west of the District where distress was reported to be acute. It was extended during the remaining months of 1899 but contracted in February 1900 owing to the advent of the *rabi* harvest. The numbers were kept low in March and April, but with the approach of the rains admissions to village relief increased, being highest (11,938) on the 4th August 1900. The distribution of relief was carried out by the Revenue Inspectors and approved patwāris who were appointed circle officers, the doles being given out monthly. Kitchen relief was started in October and gradually extended in the worst affected parts during the open season. With the rains a large extension of this form of relief took place. Altogether 133 kitchens were opened, the numbers fed rising to over 36,000 at the beginning of August. In November the kitchens were finally closed. There was a great reluctance on the part of the adult population to take cooked food and this unpopularity of the kitchens was not without its advantages. It saved them from overcrowding, a difficult matter during the rains if there is an unexpected call on supplies, and at the same time it acted as a most effective check upon indiscriminate relief.

248. Relief measures of all kinds lasted from the middle of September 1899 to the end of November 1900. During this period the highest number of persons on all forms of relief was 65,574 or 8·7 per cent. of the total population of the District on 14th July 1900. The total expenditure was Rs. 8,98,669 and the incidence per unit was 0-1-0. The total number of day units relieved was 14,378,704. Land revenue to the extent of Rs. 6,90,055 or 74 per cent. of the total demand for 1899-1900 was suspended. *Takavi* advances for seed grain and bullocks were granted to the extent of Rs. 1,11,474. In addition Rs. 8345 were distributed under the Land Improvement Loans Act and Rs. 1,32,221 from the Indian Charitable Fund. Various forest concessions were also granted and were much appreciated, but the failure of the mahuā crop reduced the value of the boon considerably. In addition to the relief afforded by Government, works were carried out by private enterprise at a total expenditure of Rs. 74,000. Rājā Seth Gokuldās spent Rs. 11,335 on works in his villages and seven or eight other mālguzārs spent over Rs. 2000 on field improvements or on village tanks.

Statistics of relief.

249. The mortality for the year 1900 in the Murwāra tahsil where there was severe distress was 34·13 per mille and in Jubbulpore and Sihorā tahsīls it was 41·90. The average for the District was 38·01 per mille, this being lower than in 1897. The death rate remained low till May 1900, when it was 3·07; the advent of cholera then caused a rise to 4 in June and July. There was a fall to 3·91 in August, but the rate again rose to 4·98 in September and 5·37 in October, both the latter months being damp and trying to people with impaired vitality. In 1900 prices ranged lower than in 1896-97. In September 1899 when the feeling of despair was greatest wheat jumped up from 14 seers to 10½ seers per rupee. But the steady imports from Bengal and the fact of there being local stocks available, together with the promptitude with which relief measures were undertaken, restored confidence and kept prices fairly steady throughout the year. The average price of wheat in 1900 was 10·4 seers per rupee, that of juār 13·5, rice 10·7, and gram 11·8 seers per rupee.

Mortality and prices.

250. A summary of the famine history gives the following results. During the forty years preceding the last settlement, while in particular years particular crops suffered, there were only two years of total or almost total failure. The wheat crop was destroyed in 1854, and in 1868 the *kharīf* failed. Nothing like a series of failures ever occurred, and such poor years as were experienced were preceded and followed by years of average crops. There was no reason to suppose that these conditions were to be interrupted and in 1892 (wrote Sir Bampfylde Fuller) it was an accepted doctrine that the Central Provinces were secure from famine. The years during which the last settlement was introduced and the seasons which followed its introduction dispelled this illusion as they brought the District an unparalleled series of misfortunes. A wet cycle was followed by a dry one. The wet years chiefly affected the best parts of the District where rust is the most deadly foe of wheat in embanked black soil; the dry years proved most disastrous to the remainder of the District where the lighter soils prevail and where the resistent and recuperative powers of the people are weaker. The effect of these severe and continuous losses necessarily told heavily upon the resources of the people. Rents fell into arrears, land fell out of cultivation, seed became scarc[illegible] and debts accumulated. Luckily for the D[illegible]trict the tale [illegible] succeeding years has been a less mournfu[illegible]e. The *kh*[illegible] [illegible]hose harvest of 1900-01 was above normal, [illegible]ugh th[illegible] [illegible]rops were not so good. The season of 1[illegible]1-02 wa[illegible] [illegible]ed [illegible]vourable, both the *kharīf* and *rabi* harves[illegible] being [illegible] [illegible]ted i[illegible]al, and liberal suspensions of revenue were necessi[illegible] [illegible]ation [illegible] rice tract of the District. The season of 1902-0[illegible] [illegible] tahsi[illegible]ly favourable one on the whole, but the rice cr[illegible] [illegible] Gu[illegible]dly in some parts and for the second year in su[illegible] [illegible]entu[illegible]uspensions of revenue were called for in some 200 [illegible] a [illegible] The year 1903-04 witnessed a return to the favour[illegible] [illegible]men[illegible]s of the early nineties, the combined outturn o[illegible] [illegible]cop[illegible]g 91 per cent. of the normal. The fall in prices and [illegible] [illegible]nde[illegible]sion in the area occupied and cropped both pointe[illegible] [illegible]eh[illegible]turn of prosperous conditions and the agricultural [illegible]ses [illegible]re reported to be showing a continuous improvement. The season of 1904-05 was not so

favourable owing to the occurrence at the beginning of February 1905 of a frost of unprecedented severity, and some suspensions of revenue were required. The year 1905-06 was a prosperous one and the District also benefited by high prices. At the close of that season the tenants as a class were reported to be well off, though many of the smaller mālguzārs were still struggling to keep their heads above water and were handicapped by the inequality of the assessments which the approaching resettlement of the District is about to correct.

CHAPTER IX.

LAND REVENUE ADMINISTRATION.

The development of system.

251. Through the mists which obscure the dawn of human existence we catch a glimpse of quartzite man hunting the forests of Jubbulpore. Being a hunter it is probable that he lived mostly on flesh; for it is doubtful whether the attentions of the Euelephas, the Hexaprotodon, and the Tetraprotodon, who were his neighbours and contemporaries, left him much leisure for agriculture. Nature shows no tenderness to the brittle bones of mankind and a few choppers and scrapers from the Nerbudda alluvium and from the surface of the trap are the only records we possess of stone chipping man. Of the land revenue settlements of the pleistocene age no official report remains. Between British dominion in India and palæolithic times there is a gulf of 400,000 years at least. So obscure is the early history of Jubbulpore that we cannot even tell the number of the dynasties that have flourished and decayed before our own day. It is not until the 3rd century B.C. that we can affirm that the plains and valleys of the District were cultivated, although to a very limited extent, by Aryan Buddhists whose civilization was of a high order.

The Buddhists succumbed before that great religious movement which culminated in the triumph of Hinduism; but the progress of civilization continued. There are still to be seen, in the Sihorā tahsīl, the remains of temples erected in the days of the Guptas, Hindu kings who flourished in the 4th and 5th centuries of the Christian era. And these relics are of such a nature as to prove beyond doubt that the builders were men of science and accomplishment. Inscriptions on the few copper plates that have been found tell us that Jubbulpore under the Guptas was administered by feudatory chieftains on behalf of the Royal House, and we gather from the obscure Sanskrit that certain divisions of territory were made for the purposes of administration. The

exact nature of the revenue system is not disclosed. It is probable that tribute was rendered in service rather than in kind for *muāfi* grants of great interest confer villages with exemption from the levy of unpaid labour or free supplies.

The 9th century of our era saw the District in the hands of the Kalachuris or Haihayas and the terms of a grant made by Rājā Karnadeva of this dynasty reveal the existence of an elaborate revenue system. In this grant the Rājā bestows a village, within certain fixed boundaries, with all rights in land and water, mango and mahuā trees, mines and quarries and miscellaneous income.

After the fall of the Haihayas and with the advent of the Gonds in the 12th century our knowledge becomes more complete, and from the latter point onwards the development of system in land revenue administration is within the province of history.

The basis of a settlement system. Survey.

252. Whether the Gonds ever made any attempt to measure land on an extensive scale for assessment purposes cannot be ascertained. But it is asserted that such few settlements as were made direct with patels and cultivators late in their rule were based on the extent of the ascertained cultivated lands of a village rated at a fixed amount for every *tūsi*.

The *tūsi* was, in point of fact, an ancient grain measure (long since forgotten), and was employed as a land measure to determine the number of *khandīs* of seed grain which could be sown in a certain space taking wheat and gram as the standard grains. The measure varied in size at different periods. During the time of the Gond Rājā Sheorāj Shāh it was equal to 4 *khandīs*. The *khandī*, which is the local grain measure of 1908, varies in different parts of the District. It has long been determined by native tradition that a *khandī* is that amount of seed grain which is required to sow an area equal to 2½ acres. The soils of the different tracts which compose this District are, however, by no means uniform and the quantity of wheat which will suffice for 2½ acres in the best black soils of the Haveli will sow a larger area of the soils of coarser texture which prevail elsewhere. In every *khandī* there are 20 *kuros*; but the twentieth part of a *khandī* may vary between the five seer *kuro* of Pātan and the measure

in use in parts of the Bijerāghogarh pargana, which is a *kuro* of 3½ seers. The fact is that the standard of measurement was for many years only employed in the fertile valley villages in which settlements were first made. In practice the *khandī* became the expression of a definite area as well as of a definite quantity, and as civilized methods spread, the standard of area and not any consideration of the original amount of the *khandī* determined the question of local measures. The *tūsi* was originally 10 acres. During the reign of Rājā Nizām Shāh the *tūsi* was raised to 5 *khandis*; and the Saugor Marāthās raised it still further, making it equal to 7 *khandīs*. The Nāgpur Government, however, again reduced it to 5 *khandīs*, but the original standard was adopted in the first settlement made under British rule.

The first serious attempts at measurement were undertaken by the Bhonsla Government in 1811. The operation was only partially carried out, did not extend to the greater part of the District, and merely comprised the cultivated area of the *rabi* yielding tracts. 'Thus,' says Mr. Russell in his report on the Settlement of 1863, 'originated the distinction between *nuptī* 'or *haveli* lands producing *rabi* crops, and *kurthā* or hilly 'lands not subjected to measurement.' It may be worth recording that these early attempts at accuracy excited great repugnance in the minds of the revenue paying classes, and that a petition was submitted to Government in which the people expressed their willingness to pay the Bhonsla any demand in reason provided only that the operations of measurement were stopped. Such measurements as were made by the first Settlement Officers of the Honourable East India Company made small claim to accuracy, for they extended only to lands in actual cultivation and included mere estimates of area. 'The figures of the Kānungos,' complained Mr. Charles Fraser, Settlement Officer, 'are incomprehensible.' 'No profitable comparison,' comments Mr. Russell, 'can be made with 'the areas recorded in the papers of the old settlements with 'those arrived at by the recent *khasrā* measurements.' Subsequently to the 2nd quinquennial settlement of 1825, reported during 1827-28, no attempt was made to obtain measurements until the survey of 1853. Major Low, reporting on the 20 years' settlement of 1835, remarked that a long period had elapsed since the measurements were made. On

the 30th November 1853 the Government of the North-Western Provinces, to which Jubbulpore then belonged, instructed the Sadar Board of Revenue 'to take measures for preparing boundary maps throughout the Province according to the improved system current in the Punjab.' Survey operations commenced but were interrupted by the Mutiny. However, the whole District except the Bijerāghogarh pargana, which only came under British rule after the Mutiny, was completed in 1861. In Bijerāghogarh the measurements were completed by August 1866, the chain used being one of 69 yards 1 foot 8½ inches in length, so designed in order that an acre might easily be measured. The next survey of the District was commenced in 1886, and was completed in 5 years at a cost of Rs. 31 per square mile. In this survey the plotting of field details was effected by specially trained patwāris on traverse plots supplied by the Survey Party. Maps are being revised and brought up to date during the settlement now in progress. The chain in use since 1886 is the Gunter's chain of 22 yards.

Under Gond rule.

253. The Gond District of Jubbulpore was a wild and primitive region. Much of the land was covered with dense jungles described by Abul Fazl as the haunt of the wild elephant. Cultivation was rude, for there was little certainty that a man would enjoy the fruits of his labour. The country was held by small Rājās and Thākurs secure in hill fastnesses such as Pachelgarh and Amodā, the very names of which the people have now forgotten. The feudal system flourished and, unless united in rendering service to the paramount power, the Rājā and the Thākur found occupation in harrying and plundering their weaker neighbours. Later, as the control of the central power became stronger, portions of territory were retained by the sovereign. These were generally managed by direct leases granted to the actual cultivators, without the intervention of middlemen; but, when the latter were employed they were displaced at pleasure as the interests of the State or the caprice of the local authorities dictated. The only description of tenures other than feudal which were generally respected were rent-free grants and some of the oldest landholders in the District trace back their rights to the period when the grant was made in favour of a distant ancestor. But

few records are available concerning the manners of Gond times, and the ink of a century ago is already so faded as to be difficult to read. Some fragments of history may interest the reader and serve to picture life under the Gond Rāj.

The Gond tāluk of Amodā embraced a tract consisting of 350 villages, many of which now fall in the Damoh District. The Rājā of this tāluk resided at Majholi and was considered one of the most powerful and influential of the chieftains tributary to Garhā-Mandlā. 'On the death of Rājā Bhunju 'Bala,' wrote Mr. Charles Fraser in 1827, 'his successors are 'traditionally described to have abandoned every moral prin-'ciple, neglected their affairs which fell into confusion from 'the absence of vigilant superintendence and to have involved 'themselves in difficulties, to overcome which they resorted to 'the most wanton and grossest crimes, creating thereby a 'general feeling of disgust and animosity amongst all depen-'dent on them. They at last excited the hostility of their own 'ministers by pertinaciously insisting on the payment of fines 'arbitrarily imposed, and drove several of them, who were of 'the Brāhman caste, in a moment of desperation to the 'commission of suicide and the destruction of the female and 'infant members of their families. The outcry caused by this 'bloody massacre was not long in coming to the notice of the 'superior Government at Mandlā and a severe but merited 'penalty was inflicted in consequence on the ill-fated chiefs 'who were shortly after deprived of their authority and 'domains by their seizure and incorporation with the other 'districts of the Garhā and Mandlā territories.'

The small tāluk of Urnā was held by a family of Lodhis with headquarters at Abhāna on the very frontier of the Gond dominions. The tāluk was exposed to inroads from Saugor during the struggle between the Governments of Saugor and Mandlā. 'Troops repeatedly passed into it,' run the old records, 'and the Thākur Rūp Sāh opposing them on every occasion was at last overcome and fell with one of his sons Ommed Singh in defence of the supremacy of the Garhā-Mandlā dynasty.' There were, however, other methods of obtaining an estate besides rendering loyal service as the chronicles of Māngarh show. 'During the Garhā-Mandlā Rāj Thākur Mān Sāh Gond came from his native village of Kumhāri in Hattā; assembling a body of disaffected persons

he commenced a series of depredations that brought him into notice and, combined with other circumstances, it was found of importance to pacify him. The tāluk was in consequence given to him in jāgir under an engagement of service and fixing on his headquarters they were named Māngarh after himself.'

Of the rates of rent and revenue under Gond rule no record is left, partly because when the amount to be paid depended only on the power to exact as much as could be given it is more than doubtful whether any systematic method of assessment was recognized, and partly because those days of storm left no settlement records behind them.

Under Saugor rule.

254. The rule of the Saugor Pandits lasted some 15 years, was weak and not remarkable for any extraordinary occurrences during its existence. It was the policy of this Government to court the good will of the Thākurs and tālukdārs whose possessions formed a complete cordon round the boundaries of the District. Fidelity was generally secured by additions to already extensive freeholds, although a payment termed a *peshkush*, in inverse proportion to the power and resources of the tālukdār, was levied from all who held grants preceding the Saugor supremacy. The system of farming villages to middlemen or patels and of tāluks and *tappās* to influential or monied members of the community, which was developed to a much greater extent under the Bhonsla rule, was more generally introduced. The office of patel, however, does not appear to have carried with it any permanent or hereditary right as to ownership of the land beyond the term of the occupant's lease. The position of tālukdār was, on the other hand, frequently recognized as hereditary. Under the Saugor Government but little if any revenue was exacted from the tālukdārs. An interesting account of the methods of tālukdāri management has been left. 'The tālukdārs,' wrote Mr. Fraser, 'in their detailed village settlements adhered to the 'practice of their former Governors in not limiting their de-'mand till the close of the year, and even then were extremely 'arbitrary in the regulation thereof. Their pecuniary embar-'rassments were concealed from no person and the perpetual 'annoyance experienced from their creditors prepared them for 'the adoption of any measures that would afford even a

'momentary relief. They selected therefore as agents men 'who were most ready in the discovery of expedients that' 'would ensure them a little quiet, and in a short time from 'inaptitude for business and habitual idleness left all their affairs 'in their hands. These men were fully aware of the link that 'connected them with their employers and did their utmost 'to raise money for their exigencies, and when fair means were 'not available for the purpose were but little scrupulous in 'having resort to foul'. Rights of tenure became so precarious that local improvements were not to be looked for. The accounts of the land revenue demand and collections under Saugor rule were nearly all destroyed by marauding bands of Gonds and Pindāris. But, from the fragments, it has been gathered that in the pargana of Garhā, which comprised about 460 villages, the assessments gradually rose until, in 1794, the demand was Rs. 2,20,000. And the collections were Rs. 2,10,067. In 1796, when the Saugor Government made over the District to the Bhonsla, the collections from Garhā were only Rs. 1,46,717. The rise during the first years of Saugor rule is attributed to the gradual discovery of the real sources of the pargana the concealment of which had been rendered possible by the loss of older records. The fall in revenue was due to the approaching loss of the country to the Saugor Government and to the diminished price of grain consequent on the withdrawal of troops.

Under the Bhonslas.

255. In 1796 Jubbulpore was given to Raghuji Bhonsla in return for aid rendered to Raghunāth Rao against Amīr Khān the Pindāri. The rule of the Bhonsla house is still spoken of as having existed during a period of great disorder. The Pindāris were loose and neither life nor property were safe. Time after time these robbers pillaged the residences of the Marāthā officials and made bonfires of the records of Government.

'The Sonpur papers,' wrote Mr. Fraser, 'do not go beyond 'the *samvat* 1867 and the accounts are of little or no value 'as the pargana was nearly waste. During the intervening 'years to the cession it was plundered by Amīr Khān; and 'Jawāhar Singh, the Jāgīrdār of Sundarpur, persevered in a 'system of daring robbery and opposition to the Government 'in the hopes of securing the grant of it in jāgīr, attacking 'and burning its villages on every favourable opportunity,

'terrifying the people and driving away the cultivators; while 'the inefficiency of the public officers was such that they 'could neither lay hold of his person nor check his violence.' Not only did the Pindāris burn the records and house of the kānungo of Panāgar but they burned the kānungo and his relatives as well. The methods of land-revenue administration under the Nāgpur Marāthās can be illustrated from the history of Garhā, a pargana which has already been mentioned in the preceding paragraph. 'After the arrival of 'the Bhonsla, collections were again on the increase till, in '1804, they were as much as Rs. 2,50,224'. 'Nanha 'Ghargia,' relates Mr. Fraser, 'was the Sūbah during the 'largest portion of that time, and it is allowed that the par-'gana was in excellent order under his authority, that the 'revenue was more universally realized by cash payments, 'extortion not so common and assignments on patels for 'arrears of pay to undisciplined troops, since so terrible an 'engine of oppression, scarcely if at all resorted to. In 'Baisākh *samvat* 1860, however, Nanha Ghargia died; his 'surviving son and successor Narain Rao was destitute of 'his ability and prudence and, in the absence of Baijnāth 'Pandit, the Diwān of his father, leaving business of every 'kind too much in the hands of less efficient and respectable 'men the receipts of the year 1861 were greatly reduced, not 'exceeding Rs. 2,07,548, a part most likely having been 'intercepted by his agents on its way to his coffers. Baij-'nāth Pandit rejoining in 1862 made over Garhā to an active 'Marāthā named Mādho Rao, who augmented the assess-'ments far beyond what was right, though he was success-'ful in collecting nearly Rs. 3,33,088. Some augmenta-'tion might have been fairly insisted on because the 'encampment of a large force of Sindhia's at Rāhatgarh 'created a great demand for the produce of the District. 'But it was undoubtedly carried beyond the proper limit and 'caused much distress and general dissatisfaction, the patels 'venturing to depute the most respectable men of their 'class to Nāgpur in order by remonstrance and complaint 'to avert the continuance of such disheartening oppression; 'and the representations of this body would appear to have 'been met with some attention, as the collections of the 'following year 1863 fell to Rs. 2,63,520. The patels

'were still discontented and another deputation was sent 'off to Nāgpur in Māgh 1863. The members of it were 'detained there for a much longer period than the first, but 'at last, in Shrāwan 1864, succeeded in obtaining a new 'Governor in Harbāji Tantia who was nominated the suc- 'cessor of Narain Rao. On assuming charge Harbāji Tantia 'gained over to his party three individuals gifted with 'considerable talents and possessed of much local informa- 'tion and influence, Daryao Singh Beohār, Kālu Bābu and 'Mulsul Dāngi, and dividing Garhā into four parts styled '*sillahs*, entrusted one to each of them keeping the fourth 'under the management of his own agent Nanūba Pandit. 'The assessment fixed was a high one, Rs. 3,13,944, but 'the small portion of it collected by them, Rs. 1,92,719, 'prevented any prejudicial results. The balance was very 'considerable, and before measures could be taken to en- 'force its payment Bāla Bhao, one of Nanha Ghargia's 'favourites, having been fined two lakhs of rupees at Nāgpur, 'as a softener for this oppressive treatment was selected as 'Sūbah and superseded Harbāji Tantia in 1865. His rule 'was shortlived for in Aghan 1865, Narain Rao recovered 'the District and immediately came to relieve him from 'further cares. Narain Rao was very inveterate in his hos- 'tility to the patels from their instrumentality in procuring 'his previous recall, showed them in consequence no mercy, 'raising his assessment at once to Rs. 3,45,045.

'His receipts, Rs. 2,25,485, were much short of his 'demands, but the scourge of exaction was stopped by the 'appearance of Amīr Khān, the celebrated Pindāri leader, who 'infested the District throughout the month of Kunwār and 'the greater part of Kārtik during which the whole of the 'lands are sown in ordinary season. This year, with the 'exception of some villages of Pātan and Barelā, the cultiva- 'tors were too much terrified to remain in their houses and 'pursue their usual occupations, but running off in all direc- 'tions to the hills for shelter, abandoned their fields which 'unsown yielded no crop or harvest.' It must be remembered that under the Bhonslas measurements were extremely imperfect and data for assessment very rough. Rents were in nearly all cases fixed by the patels on no settled principle, the rent of each field being determined without alluding to its area

however ascertained. In the *bandhwās* lands they were sometimes calculated on a nominal *bijwār khandī* and, sometimes, on the *tūsi*. In the hill villages money rents were very rare and a division of the crop general, the patel securing for himself the lion's share. But the Nāgpur Government was impolitic as well as harsh. The sympathies of the large estate-holders were alienated by the resumption of villages held revenue free, on the most trivial excuses. In some cases an allowance called a *nemnuk* was granted as a set off against the revenue assessed. But the usual expedient seems to have been the addition of the *nemnuk* to the demand which the Government hoped to collect, the set off thus becoming a nominal one only. 'The improvidence of the 'Nāgpur Government,' wrote Mr. Malony, 'in its financial 'arrangements is obvious from the frequent and unwise 'changes of occupancy among the patels, and it caused 'so much mischief and mistrust that at last no one had 'sufficient foolhardiness to risk in a speculation for new 'villages the wreck of his property, and expose his person 'to the maltreatment ordinarily resorted to by the dependents of the Kamaishdārs to raise the revenue from them. 'The Kamaishdārs were reduced to the necessity of realizing 'the assessment by their own servants from the *kisāns* in a 'great many instances as the only substitute for the agency 'of the patels whose situation was shunned and avoided as 'one of peril, unaccompanied by hope of profit or advantage. The revenue attitude of the Marāthā Government of Nāgpur was one of merciless exaction combined with utter disregard for long established tenures.

Conditions left by the Marāthās.

256. The cession of this District along with other portions of the Nerbudda Territory dates from A.D. 1818. But the events which led to the advent of British rule require no discussion in this Chapter, for they are discussed fully in many published works which are easily available. To the student of land-revenue history a knowledge of cause is above all things necessary to an appreciation of effect, and a description of the condition in which the British found the District of Jubbulpore will be useful. It has already been shown that for ages prior to the cession the revenue system had been one which weighed

heavily on men who lived in days of stress, and the fact is that Jubbulpore was in a most reduced and impoverished condition when the British arrived on the scene. The field embankments, which are characteristic of the system of cultivation in this District, are related by Mr. Cockerell to have been in a condition of utter disrepair. The inroads of Gonds had reduced much of the southern portion of the District to a state of desolation ; and the large estate which belongs to the Rājā of Imlai, who is to-day a man of considerable wealth, was altogether waste as a consequence of the feuds between Gonds and Lodhis. So much so, that not even the Nāgpur officials could realize anything from the Rājā's ancestor, who was in a condition little above beggary. 'This 'is a curious village,' wrote Mr. Cockerell, of Kūmgo, a village in the Hazūr tahsīl, 'the whole cultivated with the 'patel's own ploughs. The patel gives his ploughmen 12 to '18 *khandīs* annually and *pāy pichhowrī* (a dress). Besides 'they have a *khet* which Nāthurām estimated at 6 *khandīs* '(*bijwār*) which is sown with the patel's seed, and the pro-'duce less seed and *siwai* is theirs. The whole *bastī* consists 'of his family and ploughmen and two or three Dhimars. 'There is not even a carpenter. He must shave and say his 'prayers at Natwāra ; but this is no inconvenience as the 'villages are near each other. Now this man is *watandār*, 'has managed this way for a very long time and is not in 'debt.'

Another of Mr. Cockerell's notes is worth reproduction. 'A very curious thing, which I was not before aware of, is' writes Mr. Cockerell, 'that in Kesrondh, Pondi and Dighori 'there is not a single cultivator who pays rent in money nor 'in produce. The whole of the produce belongs to the 'patel who feeds the cultivator gratis in the rains according 'to the number of his family and not according to the 'quota of his work. In the other eight months the cultivator 'is paid in kind for embanking, ploughing, sowing, weeding, 'watching, reaping, threshing and housing. Cattle and 'seed are supplied by the patel, but if the cultivator have 'them he is allowed a consideration.'

'Such a system,' comments Mr. Fraser, 'I believe to be 'very rare and it must have originated in debts which increased 'so much that they could never be paid. At the same time

'I know that in villages held by *mahājans* they have claims on 'the cultivator which both parties are perfectly sensible can 'only run up to higher sums by the annual additions of com'pound interest and under the most favourable circumstances 'are not to be satisfied.' The testimony of old records clearly shows that, as a class, the patels of the District were, when the British arrived, in a condition of irreparable insolvency, especially in the neighbourhood of the 'large town of Jubbulpore'; while of an impoverished set of cultivators those in the most wretched condition were to be found in the fertile villages of the Sihorā *haveli* where they were, in fact, if not actually in name, the bond slaves of the mālguzār. Nor is it a matter for wonder that the condition of the country in 1818 was bad, for not only had the revenue of large tracts been realized on two separate occasions by the seizure and sale of all the cattle to be found, but the attentions of such freebooters as the Chandia jāgīrdār had resulted in the repeated destruction of the people's property.

Early British settlements.

257. The first land-revenue settlement under British auspices was made by Mr. Malony in 1818, and was continued for the succeeding year at a *jamā* of Rs. 4,17,375; which was followed by the first quinquennial settlement, made by the same officer, from 1820-24, at a *jamā* of Rs. 4,48,169. Both these settlements worked well, but in order to give some idea of the very imperfect data on which Mr. Malony was compelled to assess it may be mentioned that a system of deferred enhancements was designed to combat any possible concealment of assets. The second quinquennial settlement was concluded by Mr. Fraser, during 1827-28, from 1825 to 1829 at a *jamā* of Rs. 6,41,007 which pressed heavily. The settlement was, however, carried through with the aid of remissions and the District made good progress. The next, or third quinquennial settlement, from 1830-34, was fixed at Rs. 6,05,014 and was also carried through with the aid of remissions. Captain Sleeman made the settlement and a point of interest is his suggestion that the mālguzārs should be induced by assignments of revenue to clear the tanks of the District of 'the manure of most excellent quality' with which they were choked, and spread the same over their fields. Official talk

of 1830, and for years after, continually ran on the subject of the supposed exhaustion of the wheat-growing soils of the District and Sleeman's suggestion was highly approved of by the Agent to the Governor-General, Mr. Fraser, who noted however that 'the natives are too destitute of capital to bear the immediate expense involved.' The Supreme Government soon determined to abolish the system of making high settlements and short collections and resolved that 'the 'realization of the *jamā* should, in ordinary times, or rather 'with the exception of occurrences of extraordinary calamity, 'be regularly enforced. The amount of actual reduction and 'the distribution of the proposed demand being matter for 'the consideration of the local authorities in the first instance, 'who will of course assign their reasons.' Mr. F. C. Smith was then Commissioner of Jubbulpore and he had the following opinion to offer, an opinion, which it is interesting to reflect, was rejected. 'The prudence of the cultivators is 'not, I conceive, yet sufficiently established to make them 'lay by in good seasons for the demands of bad years, and 'we must therefore grant inordinate low *jamās* if we wish to 'have any rational prospect of adhering to this inflexible law 'of the Medes and Persians, with the probability of, after all, 'being compelled to make remissions or to lose our *asāmis*. If Mr. Russell had been writing in 1908 instead of 1868 he would not have characterized Mr. Smith's apprehensions as groundless. It was resolved too 'that the wild hill and 'forest tracts stated to be still inhabited and possessed by 'the aboriginal Gonds, under chiefs of their own, be let on 'long leases and on very low terms to the chiefs themselves, 'or to some person who is acceptable to the local chief; and 'that no attempt to *mauzāwār* administration be made in 'those tracts.' The task of making the 20 years' settlement from 1835-36—1854-55 was entrusted to Major Low. In 1834 the District had sustained a severe crop failure. Not only had the field crops failed but there was no mahuā. The price of grain was very high and great distress was felt. In the most fertile parts of the District the collections of land revenue did not exceed 10 per cent. of the demand, and in the poor tracts nothing was realized. In a letter to Mr. Smith discussing the forthcoming settlement Major Low wrote, in 1834, as follows:—'I think that about 10 per cent. reduction

'will have to be made in the *jamā* of the District. This will 'reduce it to about 5 lakhs of rupees. Beyond this it is now 'to be regretted that it was ever raised but it was, of course, 'impossible to foresee the extraordinary succession of bad 'harvests with which the people have been visited during 'the last seven years. It is not, however, the hill villages 'and parganas that require the greatest reduction, though on 'them the crops are always very precarious, but it is the 'richer villages in the plains of Garhā, Pātan, Panāgar and 'some other parganas that will require the greatest abate-'ment on account of their lands which are now in full cultiva-'tion and highly assessed becoming much exhausted.'

Major Low had also much to say about the existence of grave indebtedness amongst both mālguzārs and tenants, and as a remedy for the extortionate rates of interest exacted from tenants he proposed that 'a clause should be introduced 'into each mālguzār's lease binding him to take no more 'than 12 per cent. interest on all money transactions.' The revenue which Major Low proposed was about 15 per cent. below that of the former settlement but varied in the amount of reduction in different places. In some of the hill tracts where the crops are very uncertain the existing assessments were reduced from 20 to 25 per cent. Major Low eventually fixed the demand at Rs. 4,75,760. Writing in 1842 the Secretary to the Sadar Board of Revenue remarked 'The 'substantial happiness of the people and the security of the 'Government revenue have never been so marked as since 'the introduction of the twenty years' settlement.'

The thirty years' settlement.

258. When revision was undertaken in the middle of 1854 it was not expected that any general enhancement of the revenue demand would result, more especially as the share of assets to be left to the mālguzār was in future to be one-half and not one-third. Moreover much had to be done in the way of smoothing existing inequalities. In Jubbulpore, too, rents had always been high and the assessments full, in contrast to the Districts of Narsinghpur and Damoh where the extreme lightness and severity of the settlement respectively had had diametrically opposite effects on rent-rates, in one admitting of an enhancement in the demand, calculating upon a corresponding rise in rents, in the other necessitating

an abatement in the *jamā* to allow of existing rents being somewhat lowered for the benefit of the cultivating classes. As enquiries proceeded it soon became apparent that no enhancement could be looked for in the highly cultivated tract of Pātan, but that on the contrary, owing to some poor villages on the bank of the Nerbudda having been assessed with first class villages, some reduction would be necessary. In the tracts of Garhā and Panāgar some enhancement was anticipated, as not only had cultivation increased but prosperous times had permitted of much land improvement during the course of settlement. The rule which exempts the land improved from enhancement *on account of the improvement* until an adequate return from the increased profits has been secured on the capital invested had not then been made for the encouragement of the cultivator.

In the regularly cropped black soil villages of the Sihorā Haveli a loss of revenue was expected to result. On the other hand the remote tracts, such as Bilahrī and Kūmhi, in which a lack of reliable data and the existence of the tālukdāri tenure had always brought about a very light settlement, held forth reasonable hopes of a substantial rise, more especially as they had much improved since Major Low's settlement.

The Mutiny, and the completion of settlement.

259. The work of settlement progressed well until the middle of 1857 when it was brought to an abrupt conclusion by the breaking out of the rebellion. The Survey Party was removed and all operations connected with revision had to be entirely suspended for two years.

For upwards of eight years indeed the Settlement Department struggled on and sometimes even slumbered, but, on Sir Richard Temple becoming Chief Commissioner, it was at once seen that the work would not progress until additional staff could be supplied to the District. From the 1st July 1862 the work commenced in earnest, and, as Mr. Russell states, 'In the beginning of November 1862 the Settlement 'Officer, the Assistant Settlement Officer and the Deputy 'Collector all marched out into the interior of the District in 'different directions.'

The pargana of Bijerāghogarh, a short account of which is given in a succeeding portion of this Chapter, did not come under British rule until after the Mutiny. It was then added to the Jubbulpore District and was brought under regular settlement in July 1866. Prior to this a series of annual settlements had been made in the pargana by means of auctioning the village leases to the highest bidders. No recorded rentals were forthcoming and no measurements available. Mr. Russell states that caution was especially necessary in this newly acquired tract, and there can be no doubt that the assessment he imposed was an exceedingly lenient one. The result of the settlement may be thus stated :—

The existing demand from the Bijerāghogarh pargana was Rs. 50,324, and that for the rest of the District Rs. 4,75,145, making a total of Rs. 5,25,469.

Mr. Russell's figures were :—

	Rs.
From the Bijerāghogarh pargana...	59,983
From the rest of the District	5,09,460
Increase	43,974

or an enhancement of Rs. 8-5-7 per cent.

This assessment was confirmed in the case of the Bijerāghogarh pargana for a period of 20 years from the 1st July 1867, and in the case of the rest of the District for 30 years from the 1st July 1863.

During the currency of the 30 years' settlement.

260. For the next thirty years the Central Provinces enjoyed a period of great prosperity. In the fourth annual report submitted by the Administration we read that 'Agriculture flourished in 1864-65 so that 35,000 tons of 'grain were exported to Provinces not so highly favoured. 'The prices of produce were at least double those of ten 'years ago and treble those of twenty years ago. The 'tenants and cultivators have not had their rents raised in 'proportion to the value of their produce. More than '50,000 head of cattle were imported during the year. The 'settlement has given landed rights to nearly all the country. 'The proprietary tenures in more than twenty-five thousand 'villages or estates have been formally declared. The stamp 'revenue has risen 36 per cent. within the last three years. 'In 1862, except the Jubbulpore and Mirzāpur road there

'was none in the Central Provinces. In 1865 there were, 'exclusive of that, 370 miles finished, 120 open but not quite 'completed, 50 under construction, 70 surveyed. This is 'nothing, however, to what yet remains to be done. Still 'the roads all round the large military station of Saugor are 'impassable for guns after heavy rains; still the line down 'the Nerbudda valley is closed entirely during one half the 'year and worn into ruts two or three feet deep during the 'other half; still thousands of tons of valuable produce on 'the eastern borders are carried laboriously on the backs of 'bullocks, merely because it has not been possible to render 'the hill passes fit for wheeled carriages.' But the railway had already reached a point between Jubbulpore and Allahābād, the existing high prices 'would have borne heavily on the poor but for public works, which led to the common saying that but for these works the poor must have starved,' and the spectacle of acute distress from a glut of agricultural produce which had been witnessed on previous occasions in these Provinces was fast disappearing from the scope of possibility. Between 1873 and 1893 the area under wheat in the Jubbulpore District rose from a little over three hundred thousand to nearly five hundred thousand acres, a result which was in great part due to steady and genuine progress but which was also induced, to some extent, by the great demand for Indian wheat which arose when the granaries of the country were tapped by the railway.

The condition of the Jubbulpore District in 1893, and the new settlement.

261. At the time that the settlement fell due for revision the country had greatly changed since the days when it was brought into force. Cultivation in this District had increased by 35 per cent., the rent roll had advanced from Rs. 8,86,000 to Rs. 13,08,000 and the proprietary home farm from 168,000 to 217,000 acres. Wholesale prices of the chief staples had risen from 100 to 200 per cent., at the most moderate computation. The District had advanced in wealth and prosperity, and the only unsatisfactory feature was the indebtedness of the protected tenantry itself induced by the great expansion of credit which security of title and the enhanced value of their produce bestowed upon them. During the period of settlement the

changes in tenure of the cultivating classes had been as follows :—

	Area in acres held by			
	Mālik makbūzas.	Absolute occupancy tenants.	Occupancy tenants.	Ordinary tenants.
At commencement of settlement	51,096	305,737	97,317	415,119
At close of settlement ...	49,760	234,630	343,873	529,481

Purchase by village proprietors, causing loss by merger of the special *mālik-makbūza* right, accounts for the small decrease in the plot proprietary land. The area held by absolute occupancy tenants had declined 23 per cent. A great deal of abandonment took place during the famine of 1868. Acquisition of occupancy rights under the old twelve years' rule added enormously to the area held by occupancy tenants until 1884, when the law was altered, and the power to purchase the right granted instead. The growth of the area held in ordinary right was due to expansion of cultivation which more than covered the loss in area transferred to the occupancy land. It is not so easy to convey by figures the changes in the rent-rate which occurred during the same period. In the greater part of the Murwāra tahsil rents in kind, calculated at a share of the produce, were in vogue, while where cash rents were levied, changes in the distribution of land between the several tenures and expansion of cultivation to poorer soils make the comparison difficult. The progress of cash rents as judged by the rates per acre at which they fell at the commencement and end, respectively, of the thirty years' settlement in the Jubbulpore and Sihorā tahsils, is shown in the following table :—

	Absolute occupancy.	Occupancy.	Ordinary.	All-round.
	R. a. p.	R. a. p.	R. a. p.	R. a. p.
At the beginning of first regular settlement ...	1 8 5	1 7 0	1 6 7	1 7 3
At the end of that settlement	1 9 7	1 8 3	1 7 11	1 8 5
Percentage rise in rate ...	+ 4	+ 5	+ 6	+ 5

But these figures are entirely misleading in respect to ordinary rents. Of the area held by ordinary tenants at the close of the settlement only about a third was identical with the areas held in this tenure at its commencement, the rest consisting of inferior land broken from waste during its currency. Between rent-paying areas so differently constituted no comparison of rates is possible. Further, the large addition of poor land added to cultivation during the settlement, and necessarily held at a low acreage rental, had completely obscured the great rise of rents which took place in the fertile Haveli where land had long been closely occupied.

'In obscuring this,' wrote Mr. Craddock, the Commissioner of Settlements, 'it has hidden the real problem of the revision settlement which the Settlement Officers who made 'it had to deal with, and it is only by separately extracting 'the figures of the principal Haveli groups that the situation 'as regards ordinary rents will appear in its true light.'

Mr. Craddock then gives the figures below :—

Group.	Rate per acre at commencement of thirty years' settlement.			Rate per acre at the close of the thirty years' settlement.			Percentage enhancement effected by the mālguzārs during the currency of the settlement.
	Rs.	a.	p.	Rs.	a.	p.	
Mangelā	2	13	2	4	5	5	54
Northern Garhā	2	12	11	4	3	2	49
Pātan	2	3	5	4	8	7	104
Shahpurā...	2	7	8	4	9	3	85
Urnā	2	2	9	3	13	7	79
Pariat	2	5	11	3	14	1	64
Singaldīp	2	10	2	4	6	11	68
Panāgar	1	10	3	2	10	9	62
Katangī	1	11	0	2	11	10	62
Sadar	1	13	1	3	1	6	70
Lamkanā...	2	14	1	4	7	4	54
Majholi	1	3	7	2	2	0	73
Bachaiya...	2	11	6	2	15	5	72

It was in dealing with ordinary rents that the real crux of the settlement arose. In the poorer groups where competition had not been fanned to white heat by the wheat boom, and tenants, mostly Gonds, would resent any oppression by absconding, rents were moderate enough and were left alone. But competition among tenants and rapacity on the part of certain types of landlords had raised rents to a pitch which was unsafe in the rich groups of the Haveli and the tracts adjacent to them. At the time that the settlement operations were carried on the law gave no power to the Settlement Officer to reduce ordinary rents and at the outset it was expected that the settlement would be effected on the basis of the existing ordinary rent, the rents of protected tenants being moderately raised. Nor was the necessity for reduction at once apparent. Good seasons and a brisk export trade enabled high rents to be paid for a time, and arrears were not very considerable. When, however, the assessments of the first Haveli group were submitted, it became manifest that some attempt at reduction of the most excessive demands made on individual ordinary tenants was necessary. Unfortunately, there was a great deal of opposition to any reduction amongst landlords who considered the step an unwarranted interference with the sanctity of contract. Many, however, were sensible enough to see that a reduction of inflated assets was a measure designed to protect the true interests of the revenue payer and eventually a sum of Rs. 37,700 was knocked off the ordinary rental. The reductions gave relief to 6433 holdings scattered over 882 villages, and the arrears remitted on the basis of these reductions amounted to Rs. 18,479.

The second leading feature of the operations of the settlement was the assessment of the Bijerâghogarh pargana and adjacent areas where a system of kind rents had long been established. In these tracts the difficulty was to estimate the cash equivalent of the kind rents. The object aimed at was to find an approximate equivalent of the existing payments; and the results arrived at by the Settlement Officer, if they erred at all, were perhaps somewhat too lenient. But it must be remembered that the data available were unusually meagre and that caution was very necessary. The net result of the rental proposals in the Murwāra tahsīl was that the total

rental was raised only from Rs. 1,91,136 to Rs. 2,00,921. The revised rent rate paid by all classes of tenants in the tahsil was only R. 0-8-5 as compared with rates of R. 1-10-0 in the Jubbulpore tahsil and R. 1-8-10 in the Sihorā tahsil. A comparison of the total rental of the District as a whole at the different periods shows the following results :—

	Rs.
At the commencement of the thirty years' settlement...	8,86,393
At the close of the thirty years' settlement	13,08,386
After revision	13,59,828

The increase imposed by the Settlement Officer was less than 4 per cent. The incidence per acre of the revised rental of the whole District was R. 1-3-8 ; in individual groups the incidences ranged between Rs. 3-12-1 in the richest group (Pātan), and R. 0-3-1 in the poorest group (Kundam).

[1] Valuation of *sīr* and *khudkāsht* and *siwai* income.

262. The home farm of the proprietors at last settlement covered 216,727 acres, of which 151,912 were held as *sīr*. The area of the home farm had increased by 48,675 acres since the thirty years settlement. One-tenth of the area was leased to tenants and the rest was self cultivated. The incidence per acre of the *sīr* valuation was Rs. 2-3-2, while the all-round incidence per acre of the rental of tenants was R. 1-3-8, the former being in excess of the latter by R. 0-15-6 or 79 per cent. The large difference was due to the fact that *sīr* and *khudkāsht* lands are superior in average quality and, therefore, in value to the ryot's land. The *siwai*, or the miscellaneous income enjoyed by proprietors, consists of receipts from various sources such as *singhāra* (waternut), mahuā, *chironji*, *harrā*, lac, grazing and wood. The total amount of *siwai* income recorded at settlement was Rs. 55,024 or double that recorded at the previous settlement. The exact amount estimated from each source was not stated in the settlement records. Rs. 40,123 were, however, taken for purposes of

1 Accurate information regarding the extent of the home farm and *siwai* at present cannot be given until the settlement now in progress is complete. The assets as now recorded cannot be accepted owing to the manner in which the various schemes of abatement and revision described in this Chapter have affected the assessment records.

assessment, liberal drawbacks being allowed for fluctuations during bad years. The mālguzāri forest area in the District covers 484,805 acres, and the forest income included in the assets falls at R. 0-1-4 per acre of mālguzāri forest.

The results of the settlement.

263. The general progress which had taken place in the gross incomes of the proprietors during the course of the thirty years' settlement, including the enhancement of rents made by the Settlement Officer, can be shown by a comparison of the assets at each period, thus :—

	Assets when the 30 years' settlement was made.	Assets on which the revised settlement was based.
	Rs.	Rs.
Revenue on *mālik-makbūza* plots	24,780	55,937
Cash rental	8,86,394	13,59,828
Rental value of *sīr*, service and privileged land	2,82,101	5,11,005
Siwai income	27,212	40,123
Total ...	12,20,487	19,67,893

The revenue demand fixed at the thirty years' settlement (including that fixed at the twenty years' settlement of the Bijerāghogarh pargana) was Rs. 6,05,404. It increased during the currency of the settlement, owing to resumption of revenue-free plots, to Rs. 6,08,260. The revised demand, or *kāmil-jamā*, fixed at revision, was Rs. 10,01,059. The increase in the several tahsīls was as follows :—

Tahsīl.	Former revenue.	Revised revenue.	Percentage of increase.	Percentage of assets taken as revenue.
	Rs.	Rs.		
Jubbulpore	3,22,908	5,33,710	+65	51
Sihorā	1,93,124	3,33,296	+72	51
Murwāra	92,228	1,34,053	+45	51
Whole District ...	6,08,260	10,01,059	+64	51

The revised revenue fell on the cultivated area in the year of attestation at 12 annas. At the thirty years' settlement the incidence was 10 annas and 4 pies.

Period and cost of settlement.

264. The new settlement came into force during the years 1891 to 1894 and was made for a period of 11 to 14 years over most of the District. As modified by the schemes of abatement and revision it expired in 1905 in the Sihorā, Murwāra and Jubbulpore tahsīls, excepting in the groups of East Bargī, West Bargī, Kundam and Baghrāji the settlement of which expired in 1906.

Excluding the outlay on the preliminary traverse the total expenditure on the cadastral survey and settlement of the District amounted to Rs. 2,93,567. The cost was therefore Rs. 82 per square mile of the mālguzāri area. The traverse survey of the District was undertaken by the same Survey Party as that which surveyed Damoh and the cost of the operations conducted in this District cannot be ascertained as a separate account for each District was not maintained. The cost, however, was Rs. 31 per square mile for both the Districts, and the cost of the traverse may therefore be placed at Rs. 1,11,321, taking the total number of square miles to be 3591. Including this estimate the total cost of survey and settlement was Rs. 113 per square mile, or R. 0-2-10 per acre.

Since last settlement.

265. The existing settlement came into force with effect from the 1st July 1891 in the Bijerāghogarh pargana, and from the 1st July 1894 in one group of Murwāra and four groups of the Jubbulpore tahsīl. In the rest of the District, including all the Haveli areas, it came into force on the 1st July 1893. 'During the forty years preceding the settlement,' wrote Mr. Craddock, Commissioner of Settlements, 'while in particular years particular crops had suffered, there had been two years of total or almost total failure. Nothing like a series of failures had ever occurred.'

'In 1892,' wrote Sir Bampfylde Fuller, 'it was an accepted doctrine that the Central Provinces were secure from famine.' Mālguzārs thought that good harvests and a brisk export trade were to last for ever.

Prior to settlement an almost unbroken sequence of excellent seasons had beguiled men into accepting a very favour-

able year as a normal one and a bumper harvest as a matter of course. But the years which followed the settlement brought an unparalleled series of misfortunes. In 1892-93 the excessive cold weather rain reduced the wheat crop to half an average; in 1893-94 the heavy autumn rain, followed again by cold weather rain, worked still greater havoc; and in 1894-95 these same conditions almost entirely destroyed the Haveli wheat crop, and the other crops of the *rabi* season there and over the rest of the District were seriously injured. This wet cycle was followed by a dry one which shifted the area of the greatest damage to the *kharif* tracts where the people were least able to withstand it.

The year 1895-96 though bad enough, was followed by the famine year 1896-97. In 1897-98 there was a great improvement; but in 1898-99 the crops were again poor, and in both years there was a deficiency of October rain. These climatic disasters caused severe and continuous losses which told heavily on the resources of the people. Rents fell into arrears, land fell out of cultivation, seed became scarce and debts accumulated. The incidence of the land revenue on the cropped area rose from 14 annas to one rupee, while inferior crops were substituted for wheat over considerable areas of genuine wheat growing lands.

The schemes of abatement and revision.

266. It soon became evident that these unfortunate seasons had resulted in a degree of deterioration which called for some measures of relief. After the famine of 1897, the Commissioner of the Jubbulpore Division, Mr. (now Sir Bampfylde) Fuller reported that the calamities of that year and the years preceding it had resulted in a serious contraction of both the occupied and cropped areas over large tracts, and submitted a scheme by which in the worst affected villages temporary remissions or abatements were to be given (*a*) to the mālguzārs, on account of contraction in the occupied area, up to a maximum period of five years, and (*b*) to the tenants, on account of short cropping, up to a maximum of three years. On these principles relief was given in 658 villages, mainly in the Murwāra and the northern part of the Sihorā tahsils which suffered most severely in the famine of 1897. Under this scheme, which ceased to operate in 1901-02 abatements were granted amounting to Rs. 51,784.

But these abatements did not go far enough and, on the 30th November 1899, sanction was given to a more comprehensive scheme, also devised by Sir Bampfylde Fuller. The main features of the scheme, as modified by the late Sir Denzil Ibbetson, were :—

(1) Relief was to be given only in villages which in 1897-98 had lost at least 15 per cent., and in 1898-99 at least 20 per cent., of the cropped area of the year of attestation.

(2) Rents were to be reduced—

(*a*) temporarily on account of contraction of cropping if amounting to 10 per cent.

(*b*) permanently, if they exceeded the deduced settlement rent by more than 25 per cent.

(3) Valuations of *sīr* and *khudkāsht* lands were to be reduced in the same way as rents.

(4) In the case of changed or new holdings abatement was only to be given if it was clear that the rent was not agreed on after the holding had deteriorated or was not fixed with a fair regard to the deterioration.

(5) The revenue of a *mahāl* was to be abated by an amount corresponding proportionately with the amount by which rental assets (including valuation of *sīr* and *khudkāsht* as abated) fell short of the rental assets of settlement.

Under this scheme, which was applied to 235 villages in the Jubbulpore and 165 villages in the Sihorā tahsil (the Murwāra tahsil being omitted as not requiring relief), permanent reductions of rent were given amounting to Rs. 18,960, while the valuation of the *sīr* and *khudkāsht* was reduced to the extent of Rs. 5363, the total rental valuation being thus reduced by Rs. 26,833. In addition to this some reductions were allowed in the *siwai* estimates of the settlement, and in some very special cases 'the settlement percentage of revenue assessment was reduced.' The total reduction of revenue amounted to Rs. 20,428, which fell at 28 per cent. on the revenue of the villages affected, at 4 per cent. on the revenue of the groups dealt with, and at about 2 per cent. on the total revenue of the District. This reduction will continue until the settlement now in progress is announced.

The reductions just described proved insufficient owing to the serious failure of crops in the year 1899-1900 and more lenient treatment was found necessary in the case of certain villages where the revenue payments had been very largely enhanced. A scheme for giving relief in such cases was accordingly drawn up by Sir Bampfylde Fuller in December 1900 and approved by Sir Andrew Fraser, who was then the Chief Commissioner of these Provinces. Under this scheme the conditions of 1163 villages, in which the assessment appeared too high, were examined, and abatements amounting to Rs. 56,302 in land revenue and Rs. 7128 in cesses were found necessary and sanctioned in the case of 618 villages.

The settlement, as modified by the schemes of abatement and revision which have just been described, expired in 1905 and 1906. But the District had suffered so severely that it was only in August of 1906 that the question of revision came up for consideration. The condition of the whole District was thoroughly examined by an officer placed on special duty for the purpose, and it was found that while the previous fiscal and agricultural history of the Murwāra tahsil had resulted in conditions which held out a reasonable prospect of enhancement, the measures of reduction designed to give temporary relief had produced a most unequal distribution of the rental and revenue assessment in the tahsils of Jubbulpore and Sihorā. It was therefore decided to resettle the whole District on administrative grounds and the settlement operations which are now in progress were commenced in November 1907. It is as yet too early to attempt any definite prediction of the financial results of the settlement.

Land revenue and cesses.

267. The land revenue demand of the District in 1907-08 was Rs. 8,65,238, including Rs. 577 from a few ryotwāri villages. The demand on account of local rates was Rs. 51,645.

The following cesses are also levied at the following percentages on the land revenue :—

(*i*) Postal Cess at ½ per cent.

(*ii*) Road Cess at 3 per cent.

(*iii*) School Cess at 2 per cent.

The postal and road cesses are credited to the funds of the District Council. The recent abolition of the patwāri cess

and the additional rates represents an annual gain to proprietors of Rs. 63,464.

Special tenures and sub-rents.

268. Inferior proprietary rights exist in 54 villages and 12 villages are held by protected lessees. In 1907-08 99,057 acres of land were sub-let at an average rent of Rs. 2-11-6, which is much in excess of the all-round settlement rate of R. 1-3-8. The peculiar system of *bhāg* rents is fully described further on in para. 272. Outside Bijerāghogarh *bhāg* rents are prevalent in the tracts which adjoin Maihar and Pannā territory, such as the Barwāra and Paharua groups and also in the Murwāra and Bilahri groups. The system also prevails in parts of the Sihorā tahsīl where inferior soils are frequently cultivated on payments in kind for a term of two or three years.

Statement of tenures.

269. The total area included in holdings in 1907-08 was 1,408,373 acres and was distributed as follows :—

143,727 acres, or 9 per cent. of the total, consisted of *sīr* land ; 100,173 acres, or 8 per cent. of *khudkāsht* ; 61,598 acres or 4 per cent. were held by *mālik makbūzas* ; 203,004 acres or 16 per cent. by absolute occupancy tenants ; 277,966 acres or 19 per cent. by occupancy tenants ; 598,514 acres or 32 per cent. by ordinary tenants, and nearly 23,390 acres, or 2 per cent. were held rent free from the proprietors or in lieu of service. Since settlement the areas held by absolute occupancy and occupancy tenants have declined by 21,626 and 65,960 acres respectively while the areas held in ordinary right and as home farm have increased by 69,032 and 27,153 acres. The *mālik makbūza* area has remained practically stationary.

Ryotwari villages.

270. Eight villages have been settled in ryotwāri tenure. In 1905-06 the area occupied in them was 1862 acres and the revenue assessed Rs. 724. No land has been sold outright under the Waste Land Rules.

Revenue-free and quit-rent tenures.

271. About 317,792 acres consisting of villages, shares of villages, and holdings are held partially or wholly revenue free, and the amount of revenue so

assigned is Rs. 61,535. The most important *muāfi* estates are :—

1. The Imlai tāluk comprising 112 villages. This estate was granted to the ancestor of the present incumbent, Rājā Lallu Sāhib, about 400 years ago by the Gond Government. It is held in perpetuity on a quit-rent of Rs. 830.

2. The Bhandrā tāluk comprising 34 villages ; a Gond grant made about 250 years ago. Rājā Amān Singh pays a quit-rent of Rs. 1834.

3. The Salaiyā tāluk comprising 34 villages, a grant made by the Marāthā Government of 1805. The estate pays a quit-rent of Rs. 1667.

4. The Bheronghāt tāluk comprising 19 villages. This also was a Gond grant. The present holder Thākur Sobhā Singh pays a quit-rent of Rs. 1834.

5. The Kaimori tāluk comprising 21 villages, another Gond grant dating from 1722 A.D. Only 10 villages are held as *muāfi* by Rao Delan Singh.

6. The Ruhania *muāfi* comprising 11 villages, a Gond grant dating from 1685 A.D.

7. The Simaria *muāfi* comprising 8 villages. This was a Gond grant to a Kāyasth family but the estate was augmented by the Marāthā Government.

8. The Telwār *muāfi* comprising 5 villages, a grant made by the British Government in 1821 to a Brāhman family as a reward for loyalty.

Various minor grants have also been made from time to time for the support of temples, such as the villages of Kūnda and Badanpur granted to Saiyid Kallanshāh Fakir for the maintenance of a shrine, the village Cheolea granted to Govind Rao for the temple of Mahādeo, the village Nanhwāra granted to Kālu Pānde in 1807 A.D. by the Nāgpur Government for the upkeep of a temple, the village Bichhia Kāp granted to Rāmdās Bairāgi by the Nāgpur Government in 1799 A.D. for the temple of Thākurji, the village Hantalā granted to Gopāl Brāhman by Hirde Shāh, Rājā of Pannā, about 2 centuries ago for performing the duties of *bhandāri* (steward). Some grants were also made for loyalty shown during the Mutiny; instances of these are the villages of Mahgawān and Gāraghāt in the Jubbulpore tahsil held by a Muhammadan and a Lodhi respectively and Deori Majhgawān

in the Murwāra tahsil held by a Joshi. The village of Khirwā and three others were granted to Bakhat Singh Baghel by Gàr Singh Thākur of Gunour about a century ago as a *Bhaiyāchāri* grant and the village of Kundrehi to Dādu Shāh Dube by the Rājā of Pannā in 1759 A.D. in *dharmārth* (charity).

The Bijerāghogarh pargana and the *bhāg* system.

272. The history of the Bijerāghogarh pargana is different from that of the rest of the District, and no account of land revenue administration in the District would be complete without a reference to the peculiar conditions which prevail in the most recently acquired portion of it. To the immediate south of the Kaimur scarp, and between the East Indian Railway line on the west and Rewah on the east lies a tract of country which is to this day known as the 'Pargana of Bijerāghogarh.' In customs, habits, and language the cultivator of this region resembles his brother of Baghelkhand. Nor is this strange, for Bijerāghogarh was formerly subject to the Rājās of Pannā and is part of a slice of territory, containing seven hundred villages, which was granted by Rājā Chhatra Sāl, in the year 1780 A.D., to a soldier of fortune named Beni Hazūri. When the British first entered Bundelkhand this jāgīr was held by Beni Hazūri's son Durjan Singh, who eventually contrived to secure for himself a *sanad* in which no mention of the Pannā suzerainty was made. Durjan Singh died, and in 1831 a bitter dispute between his sons Bishan Singh and Prayāg Dās led to a partition of their inheritance. The two small states of Maihar and Bijerāghogarh thus came into existence. The latter fell to Rājā Prayāg Dās. When Beni Hazūri obtained his jāgīr he found himself in possession of a sparsely populated frontier territory most of which was covered with jungle. Here and there were to be found traces of an extremely ancient civilization long extinct. Cultivation was of the poorest order, consisting only of roughly tilled lands producing crops of the small millets. Across the border the enemy kept a strong garrison posted in Bilahrī. Such hamlets as existed were few and situated far apart, serving to shelter men whose chief business in life was to raise that breed of pack bullock for which alone their country was known. The monotony of existence was broken at intervals by bands of marauding Gonds.

In the days of Beni Hazūri there was no revenue system in Bijerāghogarh. The important business of rulers consisted in finding people weak enough to be plundered. The policy of Governments was merely 'the good old rule, the simple plan,' and such trifles as post office cesses were not asked for so long as swords were forthcoming when required. But with the growth of British influence the affairs of Central India commenced to settle themselves and, by the time that his Gond neighbours had been reduced to some sort of order during the Marāthā tenure of Jubbulpore, Durjan Singh had succeeded in establishing the foundations of a system of regular government. Accordingly the territory which fell to the share of Rājā Prayāg Dās carried with it a recognized and established right to collect annual tribute from village communities. Personal service, however, was still the most valuable asset the ruler possessed and, shortly after establishing his court within the ramparts of Bijerāghogarh and constructing a number of forts on the marches of his dominion, Prayāg Dās waged a small but successful war on the adjacent state of Chandia, by means of which he added twelve whole villages to his inheritance. By this time English rule had been firmly established in the Saugor and Nerbudda Territories and in future the Chiefs of Central India were to remain independent only so long as they refrained from disturbing the public peace. Rājā Prayāg Dās, having been duly admonished and allowed to retain the spoils of war, set to work to consolidate and improve his territory.

In 1831, or only three quarters of a century ago, the revenue on the Bijerāghogarh roll consisted of such items as a pair of bullocks from this village, a number of jars of *ghī* or a quantity of mahuā from that.

Despite the fact that the gratitude of a long line of potentates to such folk as decrepit cooks or dull astrologers had taken the somewhat thrifty form of a grant of land in this *terra ignota*, cultivation had made little or no advance since the days of Beni Hazūri and the resources of the country remained undeveloped. Wheat was not grown and land improvement unthought of. So harsh were the rigours of existence that certain poor Brāhmans put their hands to the plough and ate flesh. Prayāg Dās not only induced good

cultivating castes to come and settle in the pargana but, amongst other acts of note, he fostered the growth of a considerable industry in iron, the ore being found in abundance in the lateritic hills which are a feature of the country. He also introduced that method of cultivation, the principal benefits of which are secured by means of those enormous works of embankment called *narbāndh*. In a country the rainfall of which is comparatively light, the summer heat dry and intense, and the soils of coarse physical texture, *narbāndhs* greatly assist in remedying the deficiencies of nature, and their advantages are described in the chapter on the agriculture of the District. The largest and best of these irrigation works were made by one Kālu Patel whose name is still associated with them.

Prayāg Dās had no easy task in urging his subjects along the path of progress. He not only had to supply the tools and funds wherewith to effect improvements but to bestow presents and honours upon those who could be induced to work. Coin was very scarce in the pargana and most payments were made in kind. Moreover, the Rājā was in actual fact a partner in nearly every field growing wheat, poppy, or sugarcane crops, the cultivation of which he had himself introduced. There was one means, and one only, by which Prayāg Dās could secure an adequate income for himself and his state and that was by the acceptance of *bhāg* or a share of the produce. The share which the Rājā generally took was one-third from Brāhmans and one-half from others. Bijerāghogarh soon became the centre of a brisk bullock borne trade in grain though it is interesting to note that gram which is now an important crop in the pargana was so difficult to obtain that Prayāg Dās felt constrained to reward a contractor who had succeeded in carrying out an order for a large supply by the grant of a village on quit revenue.

Rājā Prayāg Dās reigned for eighteen years and was succeeded by his minor son, Sarjū Prasād, whose affairs were controlled for a time by the Superintendent of Nagod.

The careful system of grain rent collection designed by Prayāg Dās, the smooth working of which depended on able personal supervision, was abandoned by Sarjū Prasād as too troublesome. Villages were allotted to court favourites or leased annually to the highest bidder. Revenue was paid in

cash and spent in extravagance. Tenant right did not exist, the paying capacity of the ryot was exploited to the full, and it is no matter for surprise that old records of 1867 which deal with the pargana mournfully refer to 'scanty cultivation and the depressing effects of the late native rule.'

Sarjū Prasād joined in the rebellion of 1857, procured the murder of the Tahsīldār of Bijerāghogarh, met with a crushing defeat near Katnī, and fled from his territory in disguise only to be captured and die on his way to exile. The Bijerāghogarh pargana was then declared forfeit and annexed to Jubbulpore.

Prior to the settlement of 1895 rent fixation formed no part of the task of the officers who have at various times settled the District. Their duty was to make an estimate of the village assets in order to make a settlement between Government and the proprietors, the latter being left to settle rents with the tenants. But, when it became the duty of the Settlement Officer to fix rents and to make those rents the basis of his assessment, the extreme unsuitability of grain payments became apparent, for they not only involved insecurity of assets but were unpopular with the tenantry. Since the days of Prayāg Dās certain curious methods of rental assessment had gradually secured recognition. These methods are comprehensively termed the *bhāg* system. Under this system, which still largely survives, the ryot renders a share of his produce to the mālguzār which ranges from one-fifth to one-third, and even to one-half, according to the ryot's caste or status or the power of the mālguzār to extort.

Assessment was formerly made on the produce in two different ways, known as *kān kūt* and *agorā*. It was left to the mālguzār to decide which of the two best suited his convenience.

If the procedure was to be *kān kūt* the mālguzār or his agent convened a *panchāyat*. The kotwār generally appeared as *sarpanch*; his colleagues were tenants indebted to and subject to the influence of the mālguzār. The tenant whose crops were to be appraised was allowed no voice in the selection of the members of the *panchāyat*. It need not be stated that the assessors seldom approached their task in a judicial frame of mind. The crop was inspected as it stood in the field and an estimate of the outturn was made. No attempt was made to cut and weigh; a glance at

the crop, a little tobacco probably, and certainly much conversation sufficed to arrive at a decision which all hoped would please the mālguzār. It is superfluous to add that the procedure was unfair to the tenant. If the mālguzār decided to employ the *agorā* method the tenant was allowed to cut his crop and convey it to the threshing floor. But, as the mālguzār's share was to be determined by measurement of the cleaned produce, the sheaves had to remain under the eye of a watchman appointed by the mālguzār (though paid by the tenant) and threshing and winnowing had to be deferred until the mālguzār or his agent chose to attend.

Three measures of capacity are still to be found in the pargana. Each is called a *kuro*; but whereas the Baghel *kuro* is 4 seers and the Bijerāghogarh *kuro* 3½ seers, the *mazdūri kuro* or measure employed for the payment of ploughmen is only 2¾ seers. This may explain why the modern ploughman generally stipulates for his wages in cash. As has already been explained 20 *kuros* have always gone to a *khandī*. It was a customary part of the *agorā* procedure to ascertain the outturn in *khandīs* with a *mazdūri kuro* and then to measure out the number of *khandīs* due to the mālguzār with a Baghel or Bijerāghogarh *kuro*. By means of this simple expedient the *bhāg* rent became heavier than ever.

Village prices are generally low at harvest time and, as the system of *bhāg* developed, there came to be occasions on which it suited the convenience of a landlord to receive his rent in cash rather than in grain.

Accordingly, custom proceeded to confer on mālguzārs the option of demanding payment, either in money or in kind. But acceptance of cash payment, however convenient in other respects, was not of most advantage to the mālguzār when grain was cheap. To meet this difficulty mālguzārs combined to impose special rates according to which the tenant could be compelled to commute. The cost of winnowing and threshing was always paid by the tenant, and if the landlord had a grudge to satisfy he simply neglected to put in an appearance on the threshing floor, leaving the sheaves impounded until the unfortunate cultivator was put to serious loss. Between the Scylla of *kān kūt* and the Charybdis of *agorā* the tenant was placed in a most unenviable position.

But the troubles of the peasant were not confined to the vexatious methods just described, for the mālguzār found yet another device by which to augment his income. *Kān kūt* and *agorā* were ingenious enough, but only in securing an unduly large share of the tenant's crop to the mālguzār. Bijerāghogarh, however, possesses extensive grazing grounds and much *ghī* is produced. Tenants have also long enjoyed certain rights in mahuā, lac, and other forest produce. In order to obtain a share of the money earned by his tenants from sources other than cultivation the mālguzār imposed *harikā*, nominally a tax on ploughs but in reality an exaction from the individual. The weakest suffered most; the industrious were the most lucrative. This poll tax became a recognized feature of the *bhāg* system. As might be expected the same custom which sanctioned the continuance of *bhāg* methods sanctioned their evasion by every possible means and swindling of many kinds was common. Official documents less than twenty years old comment on the great poverty of the *bhāg* tenantry.

When the operations of the last settlement were commenced in 1888 the cultivators of Bijerāghogarh were loud in their complaints about *bhāg* oppression and it was clear to Government that the dubious methods of the system were inimical to prosperity and progress. The rents of all tenants in possession were therefore fixed in cash, and landlords were bound not to demand grain rents from such tenants by a stipulation in the record of rights. The *bhāg* system was declared to be officially defunct. During the past decade there has been some tendency in the pargana towards a revival of grain rents; but the *agorā* form has no longer its different *kuro* measures, and *kān kūt* and *harikā* have disappeared. The poor *bhāg* tenantry have given way to cultivators remarkable for their prosperity and the resources at their disposal.

We are sometimes prone to forget the swift march of events. Men who are still alive remember the days when fertile tracts, now covered with wheat, were desolate wastes unsafe for the lonely traveller because of the wolves. Copper, manganese, iron, lime, bauxite, and fine building stone,—the presence of all these seems likely to raise the pargana to a pitch of prosperity which Rājā Prayāg Das probably did

not dream of. The gulf which separates the Jubbulpore of 1808 from the Jubbulpore of 1908 is indeed tremendous. The last echo of a Pindāri disturbance has long died away; freebooters no longer lie in wait over the border; nor does there appear to be any likelihood that a 'Gond foray' will imperil the solvency of our Rural Co-operative Credit Societies and strike dismay into the hearts of the Directors of the Sihorā Central Bank. Yet it is only ninety years since Major O'Brien penned an order commanding the release of 'Pursiah who was sold by auction a few days ago for 17 rupees,' and it is not unlikely that the peculiar features of *bhāg* will soon be as obsolete as the Marāthā regulation which required that all widows should be sold and the proceeds paid into the public treasury.

CHAPTER X.

GENERAL ADMINISTRATION.

Divisional and Brigade headquarters.

273. Besides being the chief town of the District, Jubbulpore is also the headquarters of the Jubbulpore Revenue and Sessions Division which comprises the five Districts of Jubbulpore, Saugor, Damoh, Mandlā and Seoni. The Commissioner of the Division and the Divisional and Sessions Judge reside at Jubbulpore and their offices are established there. The Commissioner is the administrative head of the Division and exercises superior revenue jurisdiction and general political and administrative control over the five Districts assigned to his charge. The superior civil and criminal jurisdiction in this area is vested in the Divisional and Sesssions Judge. Jubbulpore is, besides, the headquarters station of the Jubbulpore Brigade which includes also the garrisons of Kamptee and Saugor. The Jubbulpore garrison at present consists of one British Infantry regiment, two batteries, one Native Cavalry regiment and two Native Infantry regiments. This garrison is about to be increased by one British Infantry regiment and one battery. On the outskirts of the city, outside both cantonment and the municipal limits, is the Gun Carriage Factory; the factory is in charge of a Superintendent who exercises magisterial powers and is responsible for the administration of the factory estate as well as of the factory itself.

District Subdivisions and Staff.

274. The head of the District is the Deputy Commissioner who is also the District Magistrate. The superior executive staff consists of at least one Assistant Commissioner who is a member of the Covenanted Indian Civil Service and of three or four Extra Assistant Commissioners; in addition a junior Assistant in training is frequently posted to Jubbulpore. In 1903 the subdivisional system was introduced; the Jubbulpore tahsil constitutes one subdivision, the second subdivision habitually comprises the

two tahsīls of Sihorā and Murwāra; but this charge is divided into two when pressure of work makes a redistribution necessary and the available staff allows of this being done. An Assistant is placed in executive charge of each subdivision and also exercises the powers of a Subdivisional Magistrate. The inferior executive staff comprises a Tahsīldār and additional Tahsildār for the Jubbulpore tahsīl and a Tahsildār and Naib-tahsildār in each of the other tahsīls. The Tahsīldārs are also vested with criminal powers sufficient to enab'e them to dispose of minor criminal cases. The magisterial work at headquarters is divided between two Assistants; one Assistant is required to discharge the functions of Treasury Officer and has little time for other work. At Jubbulpore there is a bench of Honorary Magistrates and there is also an Honorary Magistrate at Sihorā and two at Murwāra A third Honorary Magistrate resides at the village of Barwarā in the Murwāra tahsīl but he does not take up cases. The Cantonment Magistrate exercises jurisdiction within cantonment limits; he is at the same time Secretary to the Cantonment Committee. The civil judicial staff consists of a District and a Subordinate Judge and two munsiffs at Sihorā and Murwāra. Jubbulpore is the headquarters of the Superintending Engineer, II Circle, Central Provinces, and of the Executive Engineer in charge of the Nerbudda Irrigation Circle. The District itself is a separate Public Works division of the Roads and Buildings Branch under an Executive Engineer. The Civil Surgeon of the District is a commissioned officer of the Indian Medical Service; there is also an Assistant to the Civil Surgeon. The Forest Officer is usually a member of the Indian Forest Service but occasionally an Officer of the Provincial Service holds charge of the Forest division.

Land Record Staff.

275. The Land Record Staff working under the District Superintendent of Land Records comprises an Assistant Superintendent, 13 Revenue Inspectors and 403 patwāris. The headquarters of the Revenue Inspectors are at Shahpurā, Pātan, Bargī, Panāgar and Kundam in the Jubbulpore tahsil; at Umaria, Majhgawān, Majholi, Bahurīband in the Sihorā tahsil; and at Bilahrī, Bijerāghogarh, Barhi and Barwāra in the Murwāra tahsīl. The average number of villages in a patwāri's circle is between 6 and 7. In the year 1901 the

total number of circles as it then stood was reduced by the absorption of four circles of the Sihorā tahsil into other circles. The minimum pay of a patwāri is Rs. 100 per annum and the maximum Rs. 150. There are nine patwāris who receive a personal allowance of Rs. 50 each per annum. No patwāri in the District holds any service land. Since the 1st April 1906 patwāris have been paid entirely by Government. They are also supplied with stationery free of cost as Government servants. A certain allotment is set aside every year for payment as rewards to selected patwāris for good work. The patwāris are mostly Kāyasths. A few are Brāhmans or Muhammadans. The appointments to the post of patwāris are made hereditary as far as possible. A list is maintained besides of suitable candidates.

Litigation and crime.

276. The fluctuation in the civil litigation of this District is very marked. The number of suits instituted rises and falls by thousands. In 1862, 2438 suits were instituted. Within a period of 9 years it rose to 5240. The year 1879 had 6044 suits. After 7 years the number rose to 8553. It then gradually decreased to 5549 up till 1894. During the last ten years there has been some stability in the figure which is about 5500. Suits for money or moveable property have increased with a corresponding decrease in suits under the Rent Law and title and other suits. Many suits arising within the limits of the cantonment and the Jubbulpore tahsil are tried by Small Cause Courts. About four-fifths of the total number of suits are for sums not exceeding Rs. 100. Debts above Rs. 500 are generally secured by mortgages of landed property which every year passes from the hands of the landowners to those of bankers. Unless the mortgaged property is valuable the stipulation in the bond is usually for recovery by sale. For an unsecured debt 2 per cent. per mensem is the ordinary interest charged and for secured from 8 annas to R. 1-8-0 per cent. On very small sums advanced to persons such as day-labourers, millhands, &c., one anna in the rupee per mensem (or 75 per cent. per annum) is a not uncommon rate of interest. When money is risked to persons of scanty means a simple bond is taken and to defeat the policy of the Civil Courts of reducing interest the amount of interest is entered at an exorbitant rate accruing on the due date and the whole

amount is treated in the bond as principal. The character of litigation is generally simple. A large number of cases are either compromised, decreed on confession or ex parte, or dismissed for default. The remainder are hotly contested. Owing to the facilities and cheapness of legal advice, the local bar is swelling every year. About half of the applications for execution of the decrees remain wholly infructuous. Arbitration is not much resorted to.

The criminality of the District is at present much less than it was in 1873. The proportion of offences to population is at present 1 to 300, while in 1873 it was 1 to 160. In spite of this the District in this respect is the worst in the Province except Nāgpur. The effective strength of the magistracy employed to dispose of the criminal work is about the same, namely, 12 Stipendiary Magistrates (including one Cantonment Magistrate) and 11 Honorary Magistrates. Owing to the introduction of the Sub-Divisional system only about one per cent. of cases are now tried by the District Magistrate. Ordinarily the percentage of convictions is from 60 to 65. A case on an average lasts for about a fortnight and so also an appeal. The offences under the Special and Local Laws are numerous in this District. Cases under the Police Act, Cantonment Act and the Municipal Act are the chief contributors. In order to secure a fair standard of decency and sanitation in the town recourse to the provisions of these Acts becomes a matter of necessity and it is this that accounts for the high criminality of the District. The cases under these Acts are ordinarily tried summarily and punished with small fines. Another special feature of the District is the large number of prosecutions under the Gambling and Railways Acts. Cases of agrarian riots also occur. Robbery and dacoity are rare, but there is always a crop of murders.

Cases of opium smuggling and railway thefts and cases of counterfeit coins are also not uncommon. A large number of hurt, assault and defamation cases result in compromise, as elsewhere. Jubbulpore being a large civil station cases of trials of European British subjects and divorce suits also occur. Of the latter class of cases there has been on an average one a year for several years. The city is losing its ill repute as the resort of cheats and bad characters.

277. The following statement shows the realization of revenue in this District under the principal heads of receipt, at the end of last three decades and during the years 1906-07 :—

Statistics of Revenue.

YEAR.	Land Revenue.	Cesses.	Forests.	Stamps.	Excise.	Income Tax.	Registration.	Other Receipt.	TOTAL.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1880—81	5,13,224	....	18,204	30,927	1,18,628	[1]....	4,348	2,280	6,87,611
1890—91	6,13,354	....	25,541	34,722	1,93,942	21,586	9,060	4,473	9,02,478
1900—01	9,89,963	....	30,026	1,19,323	1,38,802	24,763	6,990	9,531	13,19,398
1901—02	8,21,801	65,246	49,282	1,39,348	1,48,600	23,638	8,026	12,127	12,68,148
1902—03	8,54,741	66,869	84,119	1,16,987	1,21,142	26,447	7,857	11,127	12,89,295
1903—04	8,66,339	68,496	41,569	1,28,324	1,55,722	20,997	6,634	10,982	12,49,063
1904—05	8,65,769	51,693	36,831	1,26,630	2,26,202	21,322	7,816	14,076	13,50,339
1905—06	8,65,807	51,643	40,346	1,26,390	2,26,362	21,829	8,086	12,554	13,53,017
1906—07	8,65,237	51,645	52,100	1,20,203	3,10,077	22,101	9,149	14,181	14,44,693

[1] No Tax prior to 1866.

278. Up to 1905 the system in force for the supply of country liquor was the sadar distillery system supplemented by outstills. In April of that year the new contract distillery system was introduced and a central distillery was established at Katni. With the exception of a small hilly tract to the east of the District and the portions of the Murwāra tahsīl bordering on Native States, where the physical features of the country render the continuance of outstills advisable, the contract distillery system has been extended to the whole District. Under this system the liquor distilled from the flower of the mahuā tree is supplied by the contractor to Government at a fixed price. The revenue is realized partly from a direct duty on liquor issued from Government warehouses and partly from license fees for the right to sell; this right is sold annually by auction. Under the outstill system the revenue is realized from license fees covering the right of distillation and sale. The income derived from country liquor in this District is large and is steadily increasing. In 1902 the revenue from this source amounted to Rs. 86,053; in 1906-07 it had increased to Rs. 2,22,430. The incidence of revenue has increased from R. 0-2-1 per head of population in 1901-02 to R. 0-5-3 in 1906-07. The number of the shops in the area under the contract system is 157. The number of outstills is 34 with 84 subordinate shops. There is thus one shop to every 2,824 persons of the population. The increased de-

Excise. Country liquor.

mand for liquor is a sure indication of the growing prosperity of the labouring classes, particularly at Jubbulpore itself. 'In rural areas the demand varies directly with the circumstances of the agricultural season. There is also a considerable demand for foreign liquor in the District, which is due to the comparatively large European population. The revenue derived from license fees for the sale of foreign liquor has increased from Rs. 1,596 in 1901-02 to Rs. 2,995 in 1907. A considerable revenue is derived from the duty on beer, which is manufactured largely for the use of European troops at Messrs. Mackinnon and Co.'s Brewery at Jubbulpore. Duty at the rate of one anna per gallon realized a revenue of Rs. 7,460 in 1906-07.

Opium and *gānja*.

279. The right of retail sale of opium and *gānja* is leased annually by auction under the supervision of the Deputy Commissioner. The increase in revenue derived from country liquor has been accompanied by an increase in that derived from these drugs; this is largely due to better supervision by the Excise officers, as the result of recent reforms of Excise Administration. In 1901-02 the revenue derived from opium and *gānja* amounted to Rs. 31,879 and Rs. 16,798 respectively; in 1906-07 it had increased to Rs. 45,140 and Rs. 28,643. In 1906-07 three shops for the sale of *charas* were opened in Jubbulpore city; a revenue of Rs. 2,428 was realized from these.

Registration.

280. The District has four registration offices including that of the District Registrar at Jubbulpore and the sub-offices at headquarters, Sihorā and Murwāra. The Office of District Registrar is vested in the Deputy Commissioner. Each sub-office has a special salaried sub-registrar. In the decade ending with the year 1901 the average number of documents registered annually was 2,230 and the receipts averaged Rs. 9,326 In recent years there has been a decrease in the average number of documents presented for registration which now stands at 1685, while the annual receipts average Rs 7,615. The restrictions imposed by the Tenancy Act of 1898 on the transfer of immoveable property mainly account for the decline in registrations. The great majority of registered documents relate to sales and mortgages of land.

281. The Jubbulpore Council with its 3 Local Boards each having jurisdiction over one tahsil came into existence in the year 1883. The constitution of the District Council and Local Boards is as under :—

District Council and Loçal Boards.

Names.	Elected members.	Nominated members.
District Council	14	6
Jubbulpore Local Board ...	29	5
Sihorā Local Board ...	20	3
Murwāra Local Board ...	17	3

The members of the District Council and the Local Boards are mostly non-officials. Three Tahsīldārs and 2 naib-tahsildārs are members of the Local Boards and office bearers. An Assistant Commissioner and an Extra Assistant Commissioner are also on the District Council. The presiding officers are elected and a non-official is the presiding officer of the District Council. The average annual income of the District Council for the decade ending on 31st March 1908 was Rs. 73,756. The principal heads of receipts were :—

	Rs.
(1) Local rates	45,106
(2) Receipts under Cattle Trespass Act....	17,188
(3) Contribution from Provincial revenue..	12,322
(4) *Nazūl* rents	4,027
(5) Ferries	2,456

The average annual expenditure for the decade was Rs. 83,202, the chief items being :—

	Rs.
Education	27,401
Civil works	28,780
Medical charges	9,783
Cattle pound charges	8,033

The income of the District Council in 1907-08 was Rs. 1,13,883 and its expenditure was Rs. 1,22,659. A total of 104 primary schools, 6 middle schools, 5 *sarais*, 55 pounds, 1 veterinary dispensary besides minor roads with ferries on them outside municipal area, are under the management of the District Council. The District Council also helps to maintain the Victoria Dispensary, the city and branch dispensaries at Pātan, Panāgar (Mission, male and female), Sihorā, Murwāra, and Bijerāghogarh. The Local Boards have no

independent income but perform inspection duty and supervise the expenditure for civil works. Recently they have been given independent powers over the expenditure to a limited extent under the supervision of the Council.

Municipalities.

282. There are three municipalities in the District, *viz.*, the city of Jubbulpore and the tahsīl towns of Sihorā and Murwāra. The municipality of Jubbulpore was constituted in 1864. It contains an area of nearly 7 square miles with a population, in 1901, of 77,159. It includes the suburb of Garhā 2½ miles to the west of the city proper. The municipal committee is composed of 2 selected and 7 nominated members. The principal sources from which municipal funds are derived are octroi, water rate, conservancy cess, tolls and dues from markets and slaughter-houses. The total income of the municipality for the year 1906-07 was Rs. 2,43,371 falling at Rs. 3-2-6 per head of the population. The expenditure for that year was Rs. 1,84,423 which excludes Rs. 63,692 on account of repayment of loan. Sihorā was created a municipality in 1867. The committee includes 6 elected and 2 nominated members. The municipal income is derived mainly from a *haisiyat* or property-tax and weighmen's fees. The total income for 1906-07 was Rs. 5,668. The expenditure amounted to Rs. 5,012 devoted to conservancy and to the maintenance of a municipal middle school and a dispensary. The Murwāra municipality was established in 1874. The municipal committee consists of 8 elected and 3 nominated members. The bulk of municipal funds is derived from a *haisiyat* or property-tax, the rents of bazar stalls and from licenses granted to weighmen. The total income of the municipality in 1906-1907 was Rs. 13,147 and the expenditure Rs. 11,923. The municipality maintains a middle school and a dispensary; for the rest conservancy and sanitation absorb the available funds.

Village Sanitation.

283. At present only two villages in the District, Pātan and Panāgar, are under the Village Sanitation Act. The Act was introduced into these villages, and also into six others in the District in 1893 but beyond the official notification no further action was taken until 1901-1902. In that year *panchāyats* were formed under the Act in Pātan and Panāgar, and the

idea of extending the Act to other villages in the District was abandoned. The sanitation committees depend for their funds on voluntary registration of cattle sales, weighmen's fees and dues levied on bazar stalls. The income from these sources has risen rapidly since the Act was first introduced. In 1901-1902 the receipts of the Pātan committee were only Rs. 249. In 1906-1907 they stood at Rs. 732; during the same period the funds of the Panāgar committee increased from Rs. 703 to Rs. 2,965. At Panāgar, which is the principal cattle mart in the District, the income from voluntary cattle registration fees in the year 1906-1907 was as much as Rs. 2,638. The Panāgar committee has spent Rs. 3,320 on the construction of drains, and Rs. 1,381 on the improvement of roads. The conservancy establishment consists of 12 sweepers, with several carts. The sums expended by the Pātan committee on road improvements and sanitation though much smaller adequately meet the requirements of the township.

Public Works.

284. The roads and the buildings of the District are under the charge of the Executive Engineer, Jubbulpore division. There are 110 miles of road in the District in charge of the Public Works Department. The total value of the buildings in the District borne on the books of the Public Works Department is Rs. 22,34,482; and the maintenance charges are calculated to be Rs. 67,035. This total does not include the cost of the construction or upkeep of the Jubbulpore water-works; these are the property of the Jubbulpore municipality but are in charge of the Public Works Department. The construction of the water-works was commenced in December 1881, and the opening ceremony was performed by the Chief Commissioner Sir J. Morris, K.C.S.I., in 1883. The water-works are being enlarged at the present time to meet the growing demands of the city, civil station and cantonments. The catchment area of the reservoir is 5·26 miles. When the extensions in progress are complete the reservoir will hold 145 millions cubic feet of water between the weir level and the low water level. The capital sunk at different periods in the construction and subsequent improvements of the water-works is up to date Rs. 13,43,267. The principal buildings at Jubbulpore



Bemrose, Collo., Derby.

are the jail constructed at a cost of Rs. 5,94,528, the District court house the construction of which absorbed Rs. 2,93,389, and the Residency now occupied by the Commissioner of the Division, built at a total cost of Rs. 58,362. The total number of buildings in charge of the Public Works Department is at present 65.

Police.

285. The total strength of the police force is 772 officers and men. A special armed reserve of 69 constables, 6 head-constables and two sergeants is stationed here for drill and discipline. This force is primarily a Provincial reserve ; it may be called out to quell riots or disturbances that may occur in any part of the Provinces, but in ordinary times it is available to assist the District police in the discharge of their duties at headquarters. The force employed in the cantonments is an European Inspector, 2 European sergeants, 6 head-constables and 40 constables. The District staff comprises a District Superintendent, a Deputy Superintendent, 7 Inspectors, 31 Sub-Inspectors, 111 head-constables and 620 constables. In addition the cadre provides for an Assistant Superintendent though none has been posted to the District for a considerable time. The railway police are now a separate body under a separate Superintendent and members of the District force are no longer deputed to duty on the railways. The native ranks are recruited chiefly from the neighbouring Districts of the United Provinces. The local rural population does not readily enlist and inhabitants of large towns are not as a rule desirable recruits. The predominant castes are Muhammadans, Brāhmans and Rājputs. The total annual cost of the police force of the District is approximately Rs. 1,79,000. The District is divided into 22 circles including the city, cantonment and civil Station-houses. In the Jubbulpore tahsil, Station-houses are located at Garhā, Shahpurā, Belkherā, Pātan, Panāgar, Kundam, Barelā and Bargi; in Sihorā tahsil at Sihorā, Majholi, Sleemanābād, Bahuriband, and Umaria ; and in the Murwāra tahsil, at Murwāra, Bhartalā, Barwāra, Barhī and Bijerāghogarh.

Kotwārs.

286. At the last settlement 1,721 kotwārs were appointed for 2,534 villages. The total amount of their remuneration was fixed at

Rs. 69,811. The minimum remuneration of a kotwār is Rs. 25 and the maximum Rs. 60 per annum, the average being Rs. 40-9-0. The tenants' contributions range from 3 pies to one anna per rupee of their rental. The mālguzār's share of the contribution is fixed at ¼th of the total remuneration of the kotwār where the rental value of the land cultivated by him amounts to ⅓rd of the ryoti rental. The same rate is fixed in the case of mālguzārs who have no home farm. In villages in which the rental value of the mālguzār's home farm exceeds ⅓rd of the ryoti rental, the mālguzār's share is fixed at the same rate on the rental value of his home farm as that paid by the ryots. The rental value of the service land, if any, held by the kotwār is deducted from the amount of the mālguzār's contribution. The total area held by kotwārs as service land is about 13,700 acres. The kotwārs in this District are mostly Dahaits. Some of them are Basors or Mehrās. The Dahait has long been employed as a village watchman. Most Dahaits are cultivators; a very few have risen to the status of mālguzārs.

Jail.

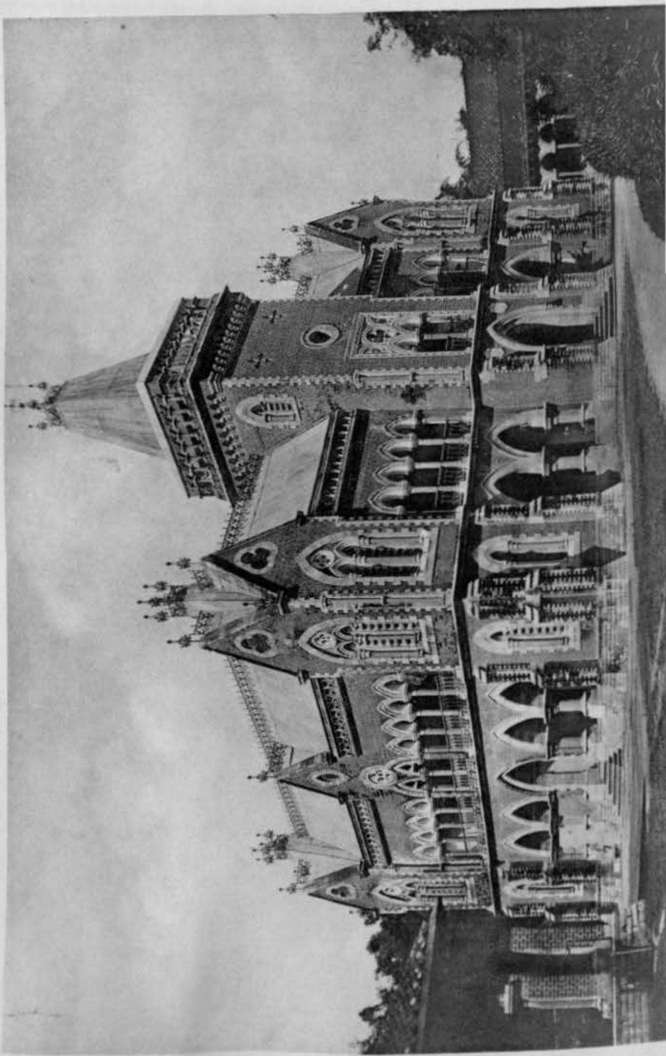
287. The central jail at Jubbulpore is a first-class jail with accommodation for 1213 males and 72 females; in addition the jail hospital can accommodate 94 males and 5 females. Observation cells are provided for 52 males and 2 females. The average daily number of convicts in 1901 was 1086; in 1904, 1905, and 1906 the average had declined to 758, 818, and 759 respectively. Weaving is the principal industry carried on in this jail. The bulk of the articles manufactured are *bhagri* cloth, *latthā* cloth and *pagrī* cloth, but *darīs* and carpets are also made in considerable numbers. The jail was formerly famous for the manufacture of tents; but this industry has been discontinued some years ago. The jail has of late obtained large contracts for the supply of *satranjīs*, mattress cases, pillow cases and covers, *bhagri* cloth, dusters and towels for the Commissariat Department of the Indian Army. The jail staff consists of a Superintendent, a Deputy Superintendent of factories, 2 jailors, 8 assistant jailors, 2 apprentiec jailors, 2 hospital assistants, 10 head warders, and 42 assistant and apprentice warders; one matron and one female warder are in immediate charge of the female convicts. The average annual expenditure for maintenance of the jail is Rs. 67,000

and the average income and expenditure of the factories falls at Rs. 1,31,000 and Rs. 1,05,500 respectively.

Education.

288. The first experiment in education at Jubbulpore was made in 1835 in which year the Government sanctioned the opening of a school at Jubbulpore. This school did not however prove a success; the failure of the experiment was definitely admitted in 1851 when the institution was made over by the Supreme Government to the Church Missionary Society, with all buildings and furniture; the Church Missionary Society did not however at once commence work and it was not till 1854 that representatives of the Society established themselves at Jubbulpore. In the course of the next few years 36 schools were started in the District. Twenty-seven of these were private institutions and the remainder Government schools; of the latter the most important were established at Jubbulpore, Pātan, Sihorā and Sleemanābād. The total number of scholars at the end of the year 1857-1858 was 855. In the year 1862-1863 the Jubbulpore District was transferred from the Territories of the North-West Provinces as they were then styled—now the United Provinces of Agra and Oudh—to the Central Provinces. In this year a Male Normal school was started at Jubbulpore. At the close of that year the Government schools numbered 47; the number of private institutions had risen to 81. The total number of scholars was 2,535. In 1863 the Church Missionary Society opened an English middle school in the Sadar Bazar of the cantonment and in 1869 an English middle school was started at Murwāra and the Female Normal school at Jubbulpore. In 1871-1872 the total number of schools was 107 with 5,217 scholars. Of these 107 institutions, only 1 was a High School, 1 the Male Normal school, 1 the Female Normal school, 4 were middle schools and the remaining 100 were designated 'Lower Class Schools.' The city aided school, afterwards called the Hitkārni Sabhā, was opened in that year; this institution was one of the 4 middle schools. In 1873 the High school at Saugor was transferred to Jubbulpore; at this period it taught up to the F. A standard and afterwards in the year 1885 it became the Jubbulpore Government College. By 1881 1882 the number of schools and scholars had increased to 147 and 8189 respectively.

Female education had by this time taken root and of the 147 schools 16 were girls' schools. In 1882 the Rājkumār school, now the Rājkumār College at Raipur, was started at Jubbulpore and in 1883 the Anjuman Islāmia opened their school. The Rājā Gokuldās Rai Bahādur Ballabhdās Mahājani middle school was started in the year 1885-1886 and during the same year a B. A. class was added to the Government High school at Jubbulpore. In 1889 the Law class was started in connection with the Government College. In 1891 the Hitkārni Sabhā and the Anjuman Islāmia middle schools were raised to the status of High schools. In that year the educational institutions numbered 149 and the students 9,314 of whom 876 were girls. On the 1st April 1892 the Murwāra middle school was made over to the municipality and in 1893 the Engineering school was brought from Nāgpur to Jubbulpore. The Rājkumār school was transferred to Raipur in 1894. In 1896-1897 the High school classes attached to the Government College, Jubbulpore, were closed; the Rājā Gokuldās Mahājani middle school was also abolished in 1898. In 1901-1902 the Training Institution was brought here from Nāgpur. At the close of the year there were in existence 200 institutions attended by 10,963 boy and 1,878 girl students. In 1902-1903 a practising Model English middle school was attached to the Training Institution; and this was subsequently raised to the status of a High school in 1905-1906. The Howbāg Methodist Episcopal Mission English middle school for girls was opened in 1905-1906, and the Murwāra Zenāna Mission English middle school in 1906-1907. This was a step forward in female education; until that year there was no English middle school for girls in the Central Provinces. At the close of the official year 1906-1907, the total number of schools was 205. This total comprised one College with 106 students and 4 High schools with 243 students; in addition to these there were 6 English middle schools for boys and 2 for girls, 12 vernacular middle schools for boys and 5 for girls, 143 primary boys' schools, 27 primary girls' schools, 4 special schools for males and one for females; the number of primary scholars was 13,842 boys and 1,721 girls. The District is under the Inspector of Schools, Jubbulpore Circle, and has two Deputy Inspectors whose ranges are



called the Jubbulpore and Murwāra ranges. Girls' schools and European schools are under their special Inspectress and Inspector.

Dispensaries.

289. The District has seven dispensaries maintained from Dispensary funds, three of which, *viz.*, the Victoria Hospital, the city, and the civil dispensary, are located at Jubbulpore, while the others are situated at Sihorā, Murwāra, Pātan and Bijeraghogarh. There are also police, jail and cantonment hospitals at Jubbulpore and a dispensary maintained by the Church of England Zenāna Mission at Panāgar. The Victoria Hospital has accommodation for 64 in-patients; the institutions at Sihorā, Murwāra and Pātan are equipped for 6, 10, and 6 in-patients respectively. The police hospital has 24 beds. The average daily number of indoor patients treated at the dispensaries during the decade ending 1901 was 82, and that of outdoor patients 682. The total number of operations performed during the year 1901 was 4,942. The major operations are chiefly for calculus and cataract; a full list of them would include most of the operations of surgery. The average yearly income of all dispensaries is Rs. 11,651, of which Rs. 4,566 are contributed by Government, Rs. 9,025 by Local Bodies and Rs. 1,915 by subscriptions. There is also the Elgin Hospital for women, one of the institutions under the management of the Countess of Dufferin's Fund; it is situated in the Malony Ganj ward of Jubbulpore city and is in charge of a lady doctor with a staff of 1 female hospital assistant, 1 matron, 1 dresser, 2 ward *dhais*, 1 cook, 1 chaukidār, 1 dhobi and 2 sweepers. The hospital has accommodation for 18 indoor patients. The daily average number of indoor and outdoor patients at this hospital during 1906 was 13 and 57 respectively The number of operations performed for the same period was 338, of which 19 were important obstetric operations.

Vaccination.

290. Vaccination is compulsory only within the limits of the Jubbulpore municipality and cantonment and in the tahsil towns of Sihorā and Murwāra. In villages vaccination though optional is pushed on vigorously every year. The staff consists of a native Superintendent, 16 vaccinators and an apprentice vaccinator. The hospital assistants at the outlying dispen-

saries also vaccinate children in the town or village in which their dispensary is situated. Approximately 20 per cent. of the population are reported to be protected at the present time. The cost of vaccination in 1906-1907 was Re. 0-1-10 per child successfully vaccinated. Revaccination is not yet freely resorted to as the people do not fully appreciate the value of repeated protection Revaccination is not compulsory, even in those areas in which child vaccination is insisted on.

Veterinary dispensary.

291. A veterinary dispensary was first opened at Jubbulpore in the year 1899. In 1904 it was removed from the small building allotted to it in the beginning into more spacious premises on the border of the civil station and the town. It is maintained by the District Council at an annual cost of Rs. 1,700. Two veterinary assistants are attached to the dispensary; one of these is a peripatetic assistant and visits the interior of the District on the outbreak of cattle disease in villages. The Veterinary Department has not yet been fully developed. The staff of assistants is gradually being increased; it is intended to appoint one assistant for each tahsil in the near future in order to meet the growing demand for the prophylactic treatment of agricultural stock. The municipality employs a separate veterinary assistant for the treatment of their cattle and the examination of animals for slaughter.

APPENDIX.

GAZETTEER OF TAHSILS, TOWNS, IMPORTANT VILLAGES, RIVERS AND HILLS.

APPENDIX.

GAZETTEER OF TAHSILS, TOWNS, IMPORTANT VILLAGES, RIVERS AND HILLS.

Abhana.—A small village in the Sihorā tahsīl, 12 miles north-west of Sihorā and 14 miles from Sihorā road station. It stands on a small stream called the Sohār at the foot of the Kahenjuā hills. The population in 1901 was 367 persons having decreased by 59 during the previous decade. On the Bijnā hill, which is close by, there is a beautiful little tank which never dries up. There are also the remains of a fortress on the same hill. The village is an old one and is said to have been founded by the Gond Rājā Nizām Shāh. The village has a primary school for boys. The proprietors are Muhammadans.

Amoda.—A small village situated on the crest of the Kaimur range 7 miles to the south-west of Bahurīband and about 20 miles nearly due west of Sleemanābād. The population in 1901 was 303. Amongst the *sati* monuments in the neighbourhood there is one with an inscription, dated Samvat 1651 or A. D. 1594, belonging to the reign of the Gond Rājā Prem Narāyan. There is a small *garh* or fortress here, which is referred to in the Alhā, a popular song. The village is divided into two *mahāls* of which a 12-anna *mahāl* is owned by a Brāhman and a 4-anna one by a Muhammadan widow.

Bachaiya.—A village in the Sihorā tahsīl, 10 miles north-west of Sihorā and 12 miles from Sihorā road station. Two small streams called the Sohār and the Patair run through the village. There is a large tank in which water nuts are extensively grown. The population in 1901 was 1193 against 1348 in 1891. A weekly market is held on Sundays, and the village has a fairly large trade in lac and water nuts. The red ochre found here is said to be of a very good quality but it has not yet attracted the attention of speculators. The village has a primary school for boys. The proprietors are Kāyasths, Brāhmans and Lodhīs.

Baghraji (from *bāgh* tiger).—A large though declining village in the metamorphic depression of hills about 25 miles to the north-east of Jubbulpore city. The population in 1901 was 1510. Fifty years ago the village was important on account of its iron trade. The iron ore, which is found in large quantities in the neighbourhood, was smelted in small furnaces both here and in the adjacent village of Sanāwal, and iron pans and other implements of agriculture made from this locally smelted iron were in great demand. The iron pans of Baghrāji had a special reputation on account of the fine polish they took. The industry has not however been able to survive the strain of foreign competition. The cheaper imported metal has taken the place of the indigenous article, and almost all the old smelting furnaces have disappeared. A large number of Lohārs of Baghrāji have gone to Jubbulpore city and have taken to making pans of the Baghrāji pattern using English sheet iron. A weekly market is held on Saturdays, but this also has largely declined in importance. The village has a primary school, a Government forest *nāka*, a post office and a District Council cattle pound. The village belongs to a Brāhman family of Jubbulpore city.

Bahuriband (or the village of many embankments).—Is a fairly large village in the Sihorā tahsil, 15 miles north-west of Sihorā and 17 miles from the Sihorā road station on the E. I. R line, and 18 miles from the Salaiyā station on the Katni-Bīna branch of the G. I. P. Railway with which it is connected by a *muram* road. Bahurīband is believed to be the site of what was formerly a very large city and was conjecturally identified by Cunningham with the Tholobana of Ptolemy. It contains many ancient remains, chief among which is a naked Jain statue, 12 feet high and 6 feet broad, having at its feet an inscription recording the erection of a temple of Shāntināth. The letters appear to be those of the 11th or 12th century A. D. To the north of the village there is a large tank at the south-west corner of which there once stood several old temples. A large area of ground is strewn with finely sculptured stones, one of which bears the 10 incarnations of Vishnu among which the fish and the tortoise are conspicuous. There are also several modern temples built by Gosains, and many tanks large and small in which the water nut is grown. There is also a *chabūtra* of Aulia

Piran Pīr Sāhib for the maintenance of which the Government has granted mauzā Kisān Pātan revenue free. The population of Bahuriband was 1469 persons in 1901 against 1274 in 1891. A weekly market is held on Wednesdays and there is some trade in lac. The village has a primary school for boys, a post office, a police station-house and a P. W. D inspection hut. The proprietors are a Baniā, a Kāyasth and a Brāhman.

Bakal.—A large village on the Sihorā-Salaiyā road 25 miles to the north-west of Sihorā. The population in 1901 was 1211. This is a great trade centre and the headquarters of a number of merchants. An important weekly market is held on Fridays to which rice is brought from the neighbouring villages and purchased in large quantities by traders for export. The area of the village is 2234 acres and it is held by the Rājā of Salaiyā, a Lodhi. Tenants include Lodhis, Brāhmans, Baniās, Rājputs and Kāyasths, all fairly well-to-do. There is a primary school and a P. W. D. inspection hut.

Barela Kalan (from *bar* banyan tree).—This is a large village 10 miles south-east of Jubbulpore on the Mandlā road with 809 inhabited houses and a population of 3178. A weekly market with an extensive trade in grain is held on Tuesdays, grain from all the neighbouring villages of the Mandlā District being brought for sale. People of all classes and professions reside here. There is a big tank in the village which provides ample fishing. The village has also a primary school, a police station and a post office. The Church of England Zenāna Mission Society have their orphanage here. There is also a military encamping ground. This village is a place of considerable antiquity and was founded by the Gond Rājās of Mandlā. It was originally held by the ancestors of the *ubāridārs* or quit-rent proprietors of Padwār; owing to their indebtedness they sold the village for Rs. 36,000 to the present occupants who are bankers of Jubbulpore city. Before 1857 the town was noted for the manufacture of gun-barrels. There are still 2 or 3 families of Lohārs, descendants of the old gun manufacturers, who hold licenses for making country guns and swords. They also make knives, nut-cutters and hollow sticks with knives in them known as *guptis*. The guns they make are muzzle loading and cost Rs. 25 or 30.



Bemrose, Collo., Derby.

Bargaon.—A fairly large and ancient village in the Murwāra tahsīl, 27 miles north-west of Murwāra and 6 miles from Salaiyā station on the Katnī-Bīna line. It lies on the old Murwāra-Damoh road and was formerly, as its name implies, a large village. The population in 1901 was 1378 as against 1672 in 1891. The area of the village is 560 acres. There is a large temple called the temple of Somnāth in the village. It is built in Gupta style and is therefore apparently as old as the 5th or 6th century A. D. It is said to have withstood the attack of Aurangzeb. There are a number of other ruins both Brahmanical and Jain. Some inscriptions have been found which mention the name of Karnadeva of the Kalachuri dynasty, indicating that the place was under the Kings of Tewar near Jubbulpore. On the banks of the Katnī river, which flows about a mile to the west of the village and forms a natural boundary between the Murwāra tahsīl and the Pannā State, there are remains of two ancient temples built of beautifully carved stones. A market is held in the village every Monday. There is a primary boys' school and a girls' school and the proprietor of the village is Thākur Lāl Shāh a Rāj-Gond.

Bargi.—A small village with a population of 793 on the Great Northern Road, 14 miles south of Jubbulpore. It is now a railway station on the Sātpurā branch of the Bengal-Nāgpur Railway. It is the principal town in the pargana of the same name. A weekly market is held on Fridays. The village contains a primary school, police station, post office, a cattle pound, the forest ranger's headquarters and a well-furnished dâk bungalow. In front of the dâk bungalow over the top of a conical hill are the remains of an old fort and a temple. A very fine view of the country around can be had from the top of this hill. Bargī was one of the 52 famous *garhs* or forts which Sangrām Shāh, the well-known Gond Rājā of Garhā-Mandlâ, possessed. Firewood is collected in large quantities from the adjacent forests and exported to Jubbulpore city from this station by rail. The proprietor is a Brāhman.

Barhi.—A large village in the Murwāra tahsīl, 30 miles east of Murwāra on the Bijerāghogarh-Chandia road. It is connected with Murwāra by a *muram* road and is about 22 miles from Chandia station on the Katnī-Bilāspur line. The

population in 1901 was 1929 against 1896 in 1891 and is composed chiefly of Baniās, Sonārs and Tamerās who are well-to-do. The area of the village is 4,468 acres and contains a lot of good land, but is badly cultivated. The tenants who live in an outlying hamlet except a few Kurmis devote their attention to trade rather than to cultivation. The mālguzār is a Brāhman living in Rewah. A market is held on Tuesdays which is attended by villagers from nearly the whole of the country to the east of the Mahánadi, as well as by people from the Rewah territory. The village has a primary school for boys, a police station-house, and a post office.

Barwara.—A small village in the Murwāra tahsīl, about 13 miles south-east of Murwāra on the Murwāra-Khitoli road and 2 miles from Rupaund station on the Katni-Bilāspur line. Its population in 901 was 905 as against 1114 in 1891. A number of traders reside here and a weekly market is held which is largely attended by grain dealers who send their goods by rail to Murwāra market. The village has a primary school, a police Station-house and a post office. The proprietor is Thākur Hanumān Singh, a Rāj-Gond, the richest mālguzār in the Murwāra tahsīl.

Belkhera Kalan (the village having *bel* trees).—A large village in the Jubbulpore tahsīl lying on the Hiran river 16 miles to the north-west of Shahpurā, a station on the Great Indian Peninsula Railway, and bordering on the Narsinghpur District. Its area is 3076 acres and the population in 1901 was 1808 against 2133 in 1891. The Lodhi jāgirdārs of the Bhaironghāt pargana, who own 19 jāgir villages on the northern bank of the Hiran, reside here. The family once held this village also in mālguzāri right, but on account of indebtedness it was sold to Rājā Gokuldās of Jubbulpore. A weekly bazar is held on Saturdays and is attended by traders from the Narsinghpur District; cotton and grain from the Kanthār tract are brought for sale. The village has a primary school, a police station-house and a post office.

Bhanrer Hills.—The south-eastern face of the Vindhyan escarpment locally called Bhānrer forms the Vindhyan range proper. The Bhānrer Range commences from the extreme south-western point of pargana Katangī and stretches in a single ridge of varying height, but generally abrupt and lofty

right through the pargana in a northerly direction until it reaches the centre where it throws off numerous spurs and in the vicinity of Katangi itself becomes a confused mass of hills over hills varying in elevation from 2000 to 2500 feet. It is here that an extensive plateau occurs more than 2,000 feet high and on it are situated a number of Gond villages. From Katangi to the junction of the Nerbudda and the Hiran in the south-western corner of the Jubbulpore District the Bhānrer hills form the boundary between Jubbulpore and Damoh.

Bhartala.—A small village in the Murwāra tahsil, 23 miles north-west of Murwāra on the Damoh-Murwāra road and 4 miles from Rithi station on the Katni-Bina line. The population in 1901 was 545 against 511 in 1891. The village has a primary school for boys, a police station-house and a Local Board *sarai* for travellers. It was formerly owned by a Rāj-Gond family of Nayākherā, but it is now in the possession of two Baniās who obtained it under a foreclosure decree.

Bheraghat (or Marble Rocks)—A small village with a population of 209 persons situated in 23° 8′ N. and 79° 48′ E. on the bank of the Nerbudda. It lies 13 miles from Jubbulpore by road and 3 miles from Mirganj Railway station on the Great Indian Peninsula Railway with a first-class metalled road leading up to it from the station. It is said to take its name from Bhrigu Rishi who lived there, but as Bherāghāt is the junction of the Nerbudda and Bāwangangā, the name may possibly be derived from *bherā*, a meeting place. Here the Nerbudda forces its way through perpendicular magnesian limestone rocks over 100 feet in height. The scenery is magnificent and its description by Captain Forsyth is deserving of reproduction.[1] 'What visitor 'to Jubbulpore can ever forget the Marble Rocks! In any 'country a mighty river pent up into a third of its width, 'and for a space of two miles or more boiling along deep 'and sullen between two sheer walls of pure white marble, 'a hundred feet in height, must form a scene of rare loveli-'ness. But in a bustling, dusty, Oriental land, the charm of 'coolness and quiet belonging to these pure cold rocks, and 'deep and blue and yet pellucid waters, is almost entrancing. 'The eye never wearies of the infinite variety of effect

[1] Forsyth's Highlands of Central India, pp. 40-45.

'produced by the broken and reflected sunlight, now glancing 'from a pinnacle of snow-white marble reared against the 'deep blue of the sky as from a point of silver; touching 'here and there with bright lights the prominence of the 'middle heights; and again losing itself in the soft bluish 'grays of their recesses. Still lower down the bases of the 'cliffs are almost lost in a hazy shadow, so that it is hard 'to tell at what point the rocks have melted into the water, 'from whose depths the same lights in reverse order are 'reflected as clear as above, but broken into a thousand 'quivering fragments in the swirl of the pool.

'Here and there the white saccharine limestone is seamed 'by veins of dark green or black volcanic rock; a contrast 'which only enhances, like a setting of jet, the purity of the 'surrounding marble. The visitor to these Marble Rocks is 'poled up through the gorge in a flat-bottomed punt as far as 'the "fall of smoke," where the Nerbudda makes her first 'plunge into the mighty rift; and there is no difficulty in 'dreaming away the best part of a day in the contemplation 'of this marvellous scene of beauty.

'The only drawback to the peaceful enjoyment of the 'scene is the presence of numerous colonies of bees, whose 'combs are to be seen attached to most of the jutting ledges 'of the rocks on the left bank. In cold weather these insects 'seem to be inoffensive; but from about March to July, any-'thing disturbing or irritating them is almost certain to 'bring them down in swarms on the offender. Their attack 'is of a most determined character; and, not long before 'my visit, had proved fatal to an engineer employed in 'sounding the river for a projected crossing of the railway. 'It is believed that, on this occasion, the bees were roused 'by some of his companions above shooting at the blue rock 'pigeons that build in the cliffs, on which they attacked 'furiously this gentleman and a friend who were together 'in a boat below. After a while both gentlemen sought 'protection by taking to the water. The one by taking long 'dives under water managed to elude the angry insects and 'hide in one of the few accessible clefts of the rock; but the 'other, although a practised swimmer, was never lost sight 'of by the exasperated creatures, and in the end was drowned 'and carried down the stream. He lies buried above the cliff,



Bemrose, Collo., Derby.

THE MARBLE ROCKS.

'under a marble slab cut out from the rock beneath which 'he met his death.[1]

'The species of bee that frequents these rocks is, I believe, 'the common *Bonhra*[2] (*Apis dorsata*), which attaches its 'large pendent combs indiscriminately to such rocks and to 'the boughs of forest trees. There are two other species of 'bees common in Central India, both much smaller than the '*Bonhra* and neither of them inclined to act on the offensive. 'The *Bonhra* is of very common occurrence in many forest 'tracts; and I have myself several times been attacked by 'them. If attacked, the only resource is to rush into the 'nearest thick bush, break off a leafy branch, and lay about 'with it wherever there is an opening. The honey and wax 'of this and the other species of bee are regular articles of 'export from our forests. The people who engage in the 'business of taking them seem to possess not a little of the 'art of beemaster, but they usually resort to more forcible 'measures, and rob the combs after suffocating the tenants at 'night with the smoke of torches. Their richest harvests are 'got from cliffs like this on the Nerbudda; and some of their 'slender ladders of bamboo slips may usually be seen at the 'Marble Rocks, hanging from the edge of the cliffs over the 'abyss of water. The honey is inferior in quality to that of 'the domesticated bee of Europe; and is sometimes even of 'a poisonous quality, owing to the bees having resorted to 'some noxious flower. It is easy to procure a comb by 'slicing it off the face of the rock with a rifle ball; and I once 'had the gratification of thus operating on the colonies at 'the Marble Rocks, from a safe position on the opposite bank, 'sending several large comb-fulls to a watery grave in the 'depths below.

'The presence of these inhospitable bees renders it a matter 'for congratulation that the finest impression of the Marble 'Rocks is to be got "by the pale moonlight." The bees are 'then quite harmless; and, if the scenery has then lost some-'thing in brilliancy of contrast in its lights and shades, it has 'gained perhaps more in the mysteriousness and solemnity

[1] In 1894 James Goudie of the Scottish Rifles met his death under similar circumstances and lies buried near Mr. Bodington, the engineer referred to.

[2] More correctly *Bhaunr*.

'that well befit a spot seemingly created by Deity for an 'everlasting temple to himself.'

'A spot so naturally remarkable as the Marble Rocks 'could not escape sanctification at the hands of the Brāhmans. 'Nothing more completely refutes the accusation of want of 'taste for natural beauty, so often made against the Hindus, 'than their almost invariable selection of the picturesque sites 'for their religious buildings. Many of the commonest 'legends of Hindu mythology have, as usual, been trans-'planted by the local priests to this neighbourhood. The 'monkey legions of Hanumān here leapt across the chasm on 'their way to Ceylon; and the celestial elephant of Indra left 'a mighty footprint in the white rock which is still exhibited to 'the devout pilgrim. Several picturesque temples dedicated 'to Siva crown the cliff on the right bank.'

The greatest height of the rocks above water level is 105 feet and the depth of water at the same place 48 feet but the basin near the travellers' bungalow is 169 feet deep. Near the village there are several conical hills surrounded by the Bāwangangā which joins the Nerbudda just below the Marble Rocks at a place known as Panchvatighāt. It is said that this *ghāt* is one of the several charming Tirthasthāns (holy places) referred to in the Mahābhārat and Yudhishthira is said to have visited it.[1] In the fork formed between the little Bāwangangā here known as Sarswati and the great river the rocks rise into a small hill which is crowned by a temple surrounded by a very curious circular cloister of considerable antiquity. A long flight of roughly hewn stone steps leads right up from the bed of the river to the temple. The position of this temple is singularly fine and commanding. Close beneath, on the south, the blue waters of the Nerbudda seem to sleep, spell bound, under the snow-white walls that shut them in. To the north and west the view is bounded by thickly wooded heights; but on the east the eye looks down on a long reach of the river, stretching away for miles towards Jubbulpore. It is just such a spot as a Buddhist would have chosen for a *stūpa*. But the attraction for the Brāhman must have been the *sangam*, or junction of the holy waters of the little Bāwan-

[1] See Vana Parva, Chapter CXXI, verses 16-17.



Bemrose Collo. Derby

gangā with those of the Nerbudda. Every confluence of rivers is held sacred ; and the mingled waters of two streams are considered more efficacious in the washing away of sin than these of any single river however famous it may be. Hence Bherāghāt is one of the holy bathing-places on the Nerbudda. Here bathed king Gayā Karna, attended by his queen and his son, his prime minister and his commander-in-chief, his treasurer and his family priest, and other officials, on the occasion of making a grant of land to certain Brāhmans. Here also bathed Queen Gosala Devi, the widow of King Narsingh Deva, on making a grant of a village to a Brāhman. The spot was, therefore, a holy one in the eyes of the Brāhmans, and was no doubt occupied at a very early period by one of their temples. The temple is known as the shrine of Gauri Shankar from a group of those deities placed inside and the cloister as the shrine of the 'Chaunsat Jogini or goddesses attendant on Durgā. There are altogether 82 statues with their names inscribed on their pedestals in characters of the 12th century A.D., the period when the worship of female energy was most prevalent. The circular form is unusual in Brāhmanical enclosures ; but it would appear to be the correct form for temples that are dedicated to the Chaunsat Joginis, as three other Jogini temples of this form are now known. The fifth Jogini temple at Khajurāha is oblong ; but all the five temples are hypæthral, or open to the sky. The temple is unique being the only one of its kind in the Central Provinces. The figures are exquisitely carved but they are said to have been mutilated by Asaf Khān's army, when he invaded the Garhā country and defeated Queen Durgāvati about the year 1564 A. D. Some inscriptions were discovered here, one of which is now in America and another *in situ* mentions the names of Kalachuri kings and queens of which the name of Jayasimha is clear. The first one records the construction of a Siva temple and is dated in the year 1156 A. D.

On Kārtik Sudi Punam, corresponding to some date in October or November, a fair is held here every year and lasts for 3 or 4 days. It is attended by a great concourse of about

[1] The name means 52 holy waters, the legend being that this little river is supplied with water by 52 springs, thus rendering it extremely sacred.

40,000 people from Damoh, Seonī, Narsinghpur and adjacent Native States. Rājā Gokuldās has built a *dharamshālā* on the *ghāt* for accommodating the pilgrims. A considerable trade is done by tradesmen in the fair and some hundreds of temporary shops are opened for the sale of goods. In the bed of the river and several feet below the surface of the bed near the waterfall and in adjacent villages is found very fine soap-stone, which is quarried and exported in large quantities. The marble stone too is quarried in adjacent villages but to a limited extent. The marble obtained from these rocks is coarse-grained and suitable only for building stone. It is very hard and chips easily and is therefore not well adapted for statuary The colours found are canary, pink, white, grey and black. Rājā Raghujī Bhonsla made a free grant of the village Bherāghāt to an ascetic Mahant Hardeo Puri Gosain, and the village is still held as a free grant in perpetuity under the British Government by the disciples of Hardeo Puri subject to the payment of a quit-rent of Rs. 5. The present holder is Mahant Jagjīwanpurī. Two bungalows, known as the upper and lower, have been built for the convenience of visitors. Persons wishing to occupy either of them may obtain passes at the Deputy Commissioner's office. Shooting and fishing are obtainable in the neighbourhood.

Bijeraghogarh.—This is a large village in the Murwāra tahsīl, 21 miles north-east of Murwāra with which it is connected by a *muram*-road and about 11 miles from Jukehi station on the Jubbulpore-Allahābād branch of the East Indian Railway.

The Rājā of Pannā had in his service a man named Beni Hazūri, who, when yet a boy, had been presented to the Rājā by a certain Banjārā. By his tact and ability Beni Hazuri gained the confidence of the Rājā and rose to the position of Dīwān of the State. He was killed in a battle with the Chief of Gurcha who had rebelled against the Rājā of Pannā. In recognition of his services the latter bestowed on his son Durjan Singh the State of Maihar which was then much more extensive and included what is known as the Bijerāghogarh pargana of the Murwāra tahsīl. On Durjan Singh's death his two sons Bishan Singh and Prayāg Dās quarrelled, and the State had to be partitioned. By this division two separate States were established in 1831. To Bishan Singh

fell what is now Maihar State and to Prayāg Dās the Bijerāghogarh pargana. Prayāg Dās established his capital at Bijerāghogarh which he founded on the sites of mauzās Padaria and Loharwāra. He built a fort (now in ruins) and a beautiful temple at a cost, it is said, of nearly two lakhs of rupees. Prayāg Dās died in 1846 leaving a son Sarju Prasād who was then a minor. The Government took over the management of the estate in 1848 and Munshi Sābit Alī, father of the late Khān Bahādur Aulād Husain, C. I. E., was appointed Manager or Tahsīldār. In 1857 Sarju Prasād broke out in rebellion and had Munshi Sābit Alī murdered in cold blood. A detachment of troops was then sent to Bijerāghogarh, a portion of the fort was blown up and it was captured. Sarju Prasād was arrested, convicted and sentenced to transportation for life, but he committed suicide at Benares on his way to the penal settlement. The estate was confiscated and Sarju Prasād's son Thākur Jagmohan Singh was granted a pension of Rs. 200 a month. In 1865 Bijerāghogarh was made the headquarters of a tahsīl and it enjoyed that position till about 1875 when the tahsīl was removed to Murwāra.

The population of the village in 1901 was 2200 as against 2606 in 1891. It has a weaving, dyeing and cotton printing industry. There is a vernacular middle school, a dispensary, police station-house and post office in the village. A market is held on Mondays and printed *rasais*, floor-cloth and quilts, and bronze bangles are sold besides the ordinary necessaries of life. The proprietor is a Brāhman.

Bilahri.—The largest village in the Murwāra tahsīl situated in latitude 23° 44′ and longitude 80° 22′, 8 miles to the south-west of Murwāra and 53 miles to the north-east of Jubbulpore. It is connected with Murwāra by a *muram* road, and the nearest railway stations are Niwār and Katnī-Murwāra, both nine miles distant.

According to tradition Bilahrī was, some centuries ago, a large and flourishing city about 24 miles in circumference, having in its centre the 'Bhainsā Kund' which now lies about 4 miles west of the village. The name of the city was then 'Puhpāvati' or Pushpāvati Nagri. The whole of the present village is strewn with images and sculptured stones from the many old temples which once stood here,

and it is sad to see the desolation where not one stone remains upon another. Houses after houses, shanties of mud and loose tiles, are seen with verandahs upheld by beautifully carved columns, taken from the abodes of the gods to provide shelter for men and beast. Among the images lying there that of the Hindu triad Brahma, Siva and Sūrya with seven horses below is most important. The only other remains of any consequence now existing are the great tank of Lakshman Sāgar, the small tank Dhabna Tāl, the Vishnu Varāh temple and the ruined temple known as the palace of Kāma Kandalā. The Vishnu Varāh temple is one of those quasi-Muhammadan buildings in which are placed a small neatly carved image of Vishnu, and a block bearing an image of Varāha (boar) both from some old temple. The Kāma Kandalā temple stands on a low rocky ridge and is now a ruin. It is a picturesque and classic looking pile. The local tradition avers that Mādhavānal, the hero of a well-known drama, was a resident of Bilahri. He was a great vocalist but he displeased the king and was banished. He thereupon went to the court of Kāmasen who had a dancing girl named Kāma Kandalā. They married and returned to Bilahrī through the assistance of another king and constructed the buildings which now go after his wife's name.

A long stone inscription (now in the Nāgpur Museum) was found in Bilahrī which records the construction of a Siva temple by Queen Nohalā, wife of the Chedi ruler Keyurvarsha who ruled at Tewar about the 11th century. When this dynasty lost Bilahrī to the Chandellas the latter made it their headquarters in this part of the country.

There is a small fort here which is ascribed to one Lakshman Singh who also gave his name to the tank mentioned above. Under native rule troops were stationed here. The fort was infested by rebels during 1857, and was in consequence blown up by mines and partially destroyed; the railway contractors subsequently completed the work of destruction by carrying away all the stone suited to their purposes.

Before the construction of the Jubbulpore-Mirzāpur road the main line of communication between the valley of the Ganges and the Nerbudda passed through Bilahri and to



Bemrose, Collo., Derby.

SCULPTURES IN THE TEMPLE OF VISHNU VARAHA, BILEHRI.

the loss of this favourable position must be partly ascribed its decline from its former prosperity. In 1901 the population of the village was 2356 as against 2751 in 1891. The betel leaf is extensively grown and is well known as Bilahrī leaf. It is described in the Ain-i-Akbari as follows :—'The 'leaf called Bilahrī is white and shining and does not make 'the tongue harsh or hard. It tastes best of all kinds. 'After it is taken away from the creeper, it turns white with 'some care, after a month, even after 20 days, when 'greater efforts are made.'[1] A market is held on Mondays and the village has a vernacular middle school having on its rolls over 100 boys, a primary girls' school with 40 girls enrolled and a post office. The village is owned by two Brāhmans and a Baniā and contains several *muafis* and *mālik makbūza* lands.

Burhagar.—A small village in the Sihorā tahsīl, about 11 miles south-west of Sihorā and 4 miles from Deori-Panāgar station. The population in 1901 was 703 having decreased by 137 during the previous decade. The inhabitants are mostly Barais. To the west of the village is a large tank called Burhān Sāgar, said to be the largest in the District. It is upwards of a mile in length and about a mile in breadth and is embanked on two sides with rough stone. It is said to be a very ancient structure, and its history is interesting. Many years ago during the reign of Hirde Shāh king of Garhā-Mandlā there lived here four brothers, Gadarias by caste, named Burhān, Sarman, Kowrai and Kodu. They used to work in a field where their daughter-in-law carried food for them. One day, on her way there she stumbled against a stone and dropped her *pairi* (foot ornament). She was therefore much annoyed and in a rage dug it up with her iron sickle, which turned into gold immediately it came into contact with that stone. The Gadaria brothers thereupon took it home and touched all the iron in their house which all became gold and so they became very wealthy ; but thinking that their wealth might excite the suspicion of the king, they presented the stone to him telling him what its virtues were. The Rājā, however, was not disposed to deprive them of what they had so luckily found and returned it asking

[1] Blochman's Ain-i-Abkari, page 72.

them to utilise their wealth to good purpose by constructing tanks. Accordingly Burhān constructed the Burhān Sāgar in this village, Sarman constructed Sarman Sāgar in Saroli-Majhgawān, Kowrai constructed Kowrai Sāgar in Kuān in the Sihorā tahsīl, and Kodū constructed Kundam Sāgar in mauzā Kundam in Jubbulpore tahsīl. There is a primary school in Burhāgar. The proprietor of the village is Beohār Raghubīr Singh of Jubbulpore, a Kāyasth.

Daimapur.—A village of 5 or 6 huts tenanted by Gonds and other low castes, in the Sihorā tahsīl 10 miles east of Sihorā. Tradition avers that it was once a great city extending over several miles. The king Vīramana ruled there with whom Rāma of Ajodhyā fought a battle, because the former's son had caught hold of the sacrificial horse let loose by Rāma. The city was then known as Devapur of which the present name Daimāpur is said to be a corruption. There can be no doubt as to the antiquity of the place to which its ruins testify. On the spot there still remain fragments of finely carved statuary and some three or four wide and deep masonry wells shored with cut stones. A number of statues taken from here are kept in the niches of the walls of a step well in Tolā, a village about 2 miles from Daimāpur. They are most beautifully carved and a majority of them belong to the Jain religion. On a pedestal of a statue there is an inscription which has been almost effaced by the sharpening of bucolic implements on it, but the date 907 is clear. It evidently belongs to the Kalachuri era and corresponds to 1155 A. D. There is a Sati stone at Daimāpur dated 1345 A. D. in which the place is named as Daimāpur Nagar or the city of Daimāpur.

Deori (Chhoti).—A small village near Sati Pahār, 4 miles west of Hardua railway station. There is an extensive group of small temples from 30 to 40 in number buried in dense jungle on the left bank of the Ken river. All have fallen down except one which is now used for burying ghosts which trouble any families in the neighbouring villages. Among the ruins there are carved pillars and doorways at the bottom of which may be seen the figures of the Ganges and Jamuna represented as Devis with their symbols of *Makara* and tortoise. There is also an inscribed pillar mentioning the name of a Kalachuri king in characters which appear to be very old. The population of the village is 196 persons. It once

belonged to the Rāj-Gond family of Nayākherā but it has now by purchase come into the possession of a ,Kalār.

Dhimarkhera.—(Village of fishermen). A small village in the Sihorā tahsil, 21 miles west of Sihorā and 17 miles from Sleemanābād road station with which it is connected by a *muram* road. It stands on a small stream called the Mauri. The population in 1901 was 535 persons having decreased by 116 during the previous decade. A market is held on Thursdays. There is some local trade in forest produce. The village has a primary school. The proprietor is Rai Bahādur Bihārilāl Khazānchi, a Bhārgava Brāhman.

Garha.—(from *garh* fort). A village four miles to the west of Jubbulpore city, forming a suburb of that city and included in its municipality. Garhā was once the capital of the Gond dynasty of Garhā-Mandlā[1] whose ancient keep, known as the Madan Mahal, still crowns the low granite range along the foot of which the town is built. Tradition gives Garhā a great antiquity. The Ain-i-Akbarī mentions that elephants were found there and that people paid rents in elephants and gold *mohars*. Its decline in importance dates from the time of the removal of the Gond dynasty to Singorgarh and subsequently to Mandlā. The Mahal is said to have been built about A. D. 1100 by Madan Singh and is now a ruin. It is a plain small building of no architectural pretensions and its only interest lies in its picturesque position perched as it is upon the very top of the hill upon a huge boulder rock. The site commands a magnificent view of the Havelī country around, especially during the monsoon months, when the country is generally flooded owing to the prevalence of field embankments and presents the appearance of a vast lake studded with trees and islands. Under the Mahal, to the west, is the beautiful Gangā Sāgar tank, and near it is the large sheet of water called the Bal Sāgar. Near the Mahal is a temple of Shārda Devī and here every Monday in Asārh and Shrāwan people come to worship the goddess. There is also a sacred tank known as Deotāl where on Kārtik Sudi 3rd a fair is held attended by about

[1] The Musalmān historians call it Garhā-Katangā, Katangā being a village about 3 miles from Garhā, containing a quarry which supplied stones for the numerous temples built at Tewar and elesewhere in its vicinity.

12,000 persons. Garhā is noted for the manufacture of women's *sāris* by Koshtās and Julāhas but the industry has declined and where formerly there were over 200 families engaged, now only 50 remain. They dye native thread blue with indigo and make red and yellow *sāris* with coloured English thread. There is no silk weaving but silk bordered cloths can be made by special order. There is an English middle school with 175 pupils on the roll, a police station-house and a branch post office. A fairly large bazar is held every day. The Mālguzārs are two Brāhman *pattīdārs*.

Gaur River.—A small river which takes its rise in the Mandlā District and enters the District near Sukri in the south-east of the Jubbulpore tahsīl. It forms a boundary between Mandlā and Jubbulpore Districts for some distance and at a place near the village of Bilaura it runs north for a little distance and then taking a south-westerly course crosses the Mandlā-Jubbulpore road at Gauriaghāt and joins the Nerbudda on the right bank at a distance of 5 miles from Jubbulpore Cantonments. It is from the bed of this river that the handsome agates, &c., which were exhibited in the Nāgpur and Jubbulpore exhibitions of 1865 and 1866, are procured. The total length of the river is 49 miles.

Gosalpur.—A fairly large village in the Sihorā tahsīl, 7 miles south-west of Sihorā and 6 miles from the Sihorā road station. It lies on the Mirzāpur road and was once a place of much importance. It is believed to have been founded by Gosaldevī, queen of the Chedi ruler of Tewar in the 12th century A.D. The population in 1901 was 1070 persons against 1377 in 1891. A weekly market, which is well attended, is held on Wednesdays. The village has a weaving and dyeing industry and some trade in lac. A number of traders are resident in the village but the volume of trade is small and the village is not likely to recover its former prosperity until the iron and manganese which abound in the neighbouring hill are properly worked. There is one beautiful tank called Rām Sāgar in the middle of which there is a temple. The tank which has never been known to dry up is said to be 300 years old. Close to the village there is jungle which abounds in wild pig and provides a favourite resort for pig-sticking enthusiasts. The village has a primary school and a branch post office. There is a large colony of

Brāhmans and Kāyasths many of whom are *muāfidārs* and *mālik makbūzas*. The mālguzār is a Kāyasth of Hirdenagar.

Gwarighat.—(Cowherd's ferry). A village pleasantly situated on the bank of the Nerbudda about 5 miles from Jubbulpore, from which the road winds picturesquely among the hills. It is a railway station on the Sātpurā branch of the Bengal-Nāgpur Railway. Its population in 1901 was 1097 as against 1264 in 1891. The Nerbudda is here fringed with masonry *ghāts* and on the great festival days (Basant-Panchamī, Kārtik Punam, and Eclipse days) these are crowded with visitors from the city eager to bathe in the sacred stream. The river is crossed by a ferry in the rains, but for the rest of the year a temporary bridge is built for wheeled traffic. During part of the cold and all the hot weather the river is fordable for foot passengers but in the rains it often becomes a rapid torrent more than 50 feet in depth, and the view is then very striking. Two miles above the village at Khirehnighāt near the junction of the Nerbudda and the Gaur the river is bridged by the Bengal-Nāgpur Railway. The mālguzār of the village is a Parwār Baniā. The population of the village consists mostly of Deccani Brāhmans who depend for their livelihood on alms given at the *ghāt* by the pilgrims. A police outpost, a District Council *sarai* and some *dharamshālas* constitute the public buildings.

Hiran River.—One of the principal affluents of the Nerbudda on its right bank. It takes its rise from a large tank in mauzā Kundam in Jubbulpore tahsīl in the south of the District and 28 miles to the east of Jubbulpore town. There is a legend connected with the tank and the rising of the river from it. It is said that one Kalyān Singh, a Gond chief, lived here in ancient times, and he had an only daughter named Hira. She was betrothed to a boy who, according to Gond custom, was residing in Kalyān Singh's house, passing the customary time of servitude. Kalyān Singh had dug this tank. When the tank was ready the water overflowed and burst the banks of the tank. To prevent a repetition of this accident Kalyān Singh was advised to make a human sacrifice. He is said to have sacrificed his would-be son-in-law to appease the angry Water God, and the water subsided. Must Hira, following her lover, also throw herself into the tank next day, when the water immediately rose again,

burst the embankments and formed the Hiran river. A variant of the same story is that the Kundam tank was constructed by one of the four Gadaria brothers, who found the philosopher's stone which turned iron into gold.[1] Another story is that tank always used to break its bank. There lived a girl called Hiria, an Ahīrin, and she had a dream that until a woman had been sacrificed at the tank it could not be repaired. So she gave herself to the sacrifice, and on its consummation a spring of water came from the tank and became the river Hiran.

The river, after taking its rise in the village, takes a northerly course for some distance and from Kūmbhi in Sihorā tahsīl it bends to the west and crosses the railway line and the old Mirzāpur road at a point 2 miles to the south of the Sihorā road station; and from thence, taking a slightly south-westerly course, forms a natural boundary between Jubbulpore and Sihorā tahsīls from about two miles north of Singaldīp up to a place where it is met by a minor stream Kair from the north. The Kair makes a wonderful cut right through the Kaimur hills in order to fall into the Hiran river near Katangī at a place called the *Katao*. It is from this place that the Hiran takes a more south-westerly course and runs parallel with the Bhānrer hills, meeting many minor streams in its way and finally falling into the Nerbudda river near Sānkal in the Narsinghpur District. During its course many streams such as the Belaura, the Sohār and the Kair fall into it, but its principal affluent is the Pariat which joins it about 4 miles south of Singaldīp. The river from the point at which it takes a bend near Katangī until it joins the Nerbudda becomes of some importance, its previous course being that of a large stream. The bed of the Hiran here is in most places deep and the banks precipitous. It was described by the Settlement Officer in 1869 as 'admirably suited for irrigation.' Neither then nor since settlement has any such use been made of it. A good deal of melon cultivation is, however, carried on in its bed by Dhīmars. The river floods frequently, but the floods merely scour the land and ruin the crops without leaving any deposit to compensate for the damage done. The river is fordable at various points in the dry season and cattle from surrounding parts are driven

[1] See for the detailed legend under Burhāgar, p. 342.

across to the grazing lands in the Kaimur and Bhānrer hills which run parallel to the river at a distance of only a few hundred yards. The Hiran in its course through this part receives 3 nullahs of considerable size—the Rāmnāla, the Deonāla and the Garhā. In most years they flow all the year round and there is a little irrigation from the two latter. The total length of the river is about 120 miles.

Imlai (from *imlī* tamarind).—A village situated near the road between Jubbulpore and Shahpurā, and lying 22 miles due east of the former. Between Imlai and Jubbulpore are low trap hills covered with jungle. The population of the village, according to the census of 1901, was 497. It is a rising village and is the headquarters of the *tālukdār* (military grant holder) of the Imlai pargana consisting of 114 villages. This estate has been in possession of the family for the last 12 generations. It was bestowed 450 years ago by the Gond Rājā Prem Narāyan on his relative Lāl Dās, the ancestor of the present holder. The Marāthā government imposed a quit-rent which has been continued by the British Government. The hereditary title of Rājā was conferred on the family by Government order No. 827, dated the 28th February 1857, the first recipient being Rājā Dilrāj Singh, grandfather of the present representative Rājā Vishwanāth Singh. The mansion of the Rājā stands on an elevated site in the village and can be seen from a distance. There is a vernacular school in the village and a weekly bazar is held on Sundays. There is a camping ground with a good water-supply.

Indrana.—A fairly large village in the Sihorā tahsil, 18 miles south-west of Sihorā and 10 miles from Deori-Panāgar station with which it is connected by a *muram* road. It stands on the right bank of the Hiran river. The population in 1901 was 1149, having decreased by 194 during the previous decade. The village has some trade in lac. There is a primary school for boys. A weekly market is held on Sundays and a small annual fair takes place on Basant Panchami day. The proprietor is a Lodhī.

Itora.—A small village picturesquely situated on the banks of the Mahānadi, 35 miles to the north-east of Murwāra on the road from Barhī to Amarpur of the Rewah State, and about 21 miles from Bhadanpur station on the East Indian Railway line. The village is said to have been founded by

one Sivapāl Singh Baghel, who came from Itār, a village on the banks of the Sarjū. He named the village Itorā after his native place. The village contains an old but ruined fortress and a temple of the goddess Chandī. There is a fine reach of the Mahānadi opposite Itorā about a mile and a half in length, where the depth of water is found to be over 30 feet in April, and a journey along this reach from Itorā to Gandhkāli and onwards to Khutesar would amply repay the lover of natural scenery.

The population of the village was 684 in 1901 against 919 in 1891. No weekly market is held here, but twice in the year, once on the 9th day of the 2nd fortnight of Kunwār and again on the 9th day of the 2nd fortnight of Chaitra, a fair is held in honour of the goddess Chandī. The fair lasts for a day only on each occasion and is seldom attended by more than about 200 persons. The village has a primary school for boys. The proprietor is a Brāhman.

Jubbulpore Tahsil.—The headquarters tahsīl consisting of 1168 villages lying towards the southern end of the District. It is bounded on the north by the Damoh District, on the south by the Seonī, Narsinghpur and Mandlā Districts, on the east by the Sihorā tahsīl, and on the west by the Narsinghpur District. The tract lying to the north of the Nerbudda bounded to the east by the East Indian Railway line and to the north by the river Hiran and extending towards the west up to the junction of the Nerbudda and the Hiran constitutes the Haveli portion of the tahsīl and is a flat and open plain of black soil of the most fertile description, and well adapted for wheat cultivation. During the monsoon months the greater portion of it is flooded owing to the prevalence of field embankments and it then presents the appearance of a vast lake studded with trees and islands. In the winter season a broad expanse of green fields of wheat stretches out as far as the eye can reach. This most valuable Haveli portion of the tahsil is comprised in the 9 assessment groups of (1) Mangelā, (2) Northern Garhā, (3) Pātan, (4) Urnā, (5) Barghāt, (6) Shahpurā, (7) Singaldip, (8) Panāgar and (9) Sadar, and it includes 511 villages of the tahsīl covering an area of 450 square miles The area along the banks of the Nerbudda and the Hiran

General Description.

on the borders of this tract is very uneven and cut up by ravines; it is known as the Kanthār tract of the tahsīl and is comprised in the 5 assessment groups of (1) Katangī, (2) Hiran, (3) Nerbudda, (4) Bhānrer and (5) Bherāghāt. Gram, cotton, juār as well as rice is grown in this tract. Thirdly, comes the northernmost tract of the tahsil known as the Bargī pargana comprised in the 3 assessment groups of Bargī East, Bargī West and Barelā. Low hills and jungles are here intermixed with cultivation to a considerable extent, otherwise the tract is not much inferior to the Kanthār tract. The fourth subdivision is the eastern portion of the tahsīl comprising the hilly and jungly tracts and constituting the Kundam, Baghrāji and Sundarpur assessment groups. It is peopled by Gonds. The prevailing soil is of poor quality and millets are the principal crop. This tract resembles the adjoining District of Mandlā, both in point of cultivation and as regards its natural characteristics. The Nerbudda, Hiran and Gaur are the principal water channels of the tahsil. The Nerbudda enters the tahsīl from the Mandlā side, and after traversing the southern portion of the tahsīl in a westerly direction enters the Narsinghpur District near its junction with the Hiran. It forms for a part of its course from the East Indian Railway bridge over it to its junction with the Hiran the south-western boundary between Jubbulpore and Narsinghpur; the Gaur, a small river, enters the tahsīl from the Mandlā District and joins the Nerbudda on the right bank at a distance of 5 miles from Jubbulpore near the Sātpurā Bengal-Nāgpur Railway bridge. The Hiran is also an important affluent of the Nerbudda. It rises from a tank in mauzā Kundam in the tahsīl and attains a width of 600 yards at its confluence.

Population.

The population of the tahsil in 1901 was 332,488 and in 1891, 361,889 persons, the decrease during the decade thus being 8·1 per cent. as compared with the decrease of 7·2 per cent. in Murwāra and 12·1 in Sihorā. The density of population in 1901 was 237 per mile in Jubbulpore tahsil. The population of Jubbulpore city was 90,316 in 1901 as against 84,481 in 1891. The other important towns in the tahsil are :—Garhā, Panāgar, Pātan, Barelā, Katangī and Shahpurā. Garhā is included in the

Jubbulpore municipality and Panāgar and Pātan are under the Village Sanitation Act. Other large villages with a population of more than 1,000 are the following :—Tewar, Sakrā, Piparia Kalān, Mangelā, Murrai, Magarmuhā, Mankehdī, Kaimori, Gwārighāt, Bhīta, Baghrāji, Mātanpur Belkherā and Katrā Belkherā.

Agriculture.

The agricultural conditions of the tahsīl vary greatly. The Haveli with its black soil is the most fertile tract. The Kanthār or river bank tracts contains land of all degrees of excellence, from that resembling the Haveli flats to the wretched labyrinths of ravines and nullahs, where the sandy soil produces nothing but precarious crops of stunted cotton and juār. The hilly tract towards Kundam and Baghrāji contains *patarua* and *bhatua* lands and where there is black soil it is of a very poor quality, closely resembling the adjoining portion of the Mandlā District. At the last settlement nearly 55 per cent. of the total area in cultivation in the Jubbulpore tahsīl was classed as *kābar* or *mund* (against 43 per cent. in Sihorā and 12·6 per cent. in Murwāra), 6 per cent. as *domattā*, 3 per cent. as *sahrā* or *kachhār* and 36 per cent. as *patarua*, *bhatua* or *ritua*. As to position 34 per cent. was classed as embanked, 2·70 per cent. as *tagar bandhia*, 1·60 per cent. as *jhilān* and the rest nearly 62 per cent. as *tagar*, *tikurā*, *bharkīla*, etc. At settlement 63 per cent. of the total area of the tahsīl excluding the Government forest was in occupation and 60 per cent. was under cultivation. There has since been a great rise both in the area in occupation and that under cultivation. The total area under crop has risen from 508,003 acres at settlement to 1,058,722 acres in 1906-07.

The statement on the next page shows the area under the principal crops at settlement and during the years 1900-08.

Owing to extension of cultivation the area under every crop has increased and there has been no deterioration in cropping. The double cropped area has increased nearly 30 per cent.

	Rice.	Juar.	Kodon & Kutki.	Til.	Wheat	Gram.	Linseed	Sugar-cane.	Total Cropped Area.
At Settlement ..	38,295	32,569	54,554	63,483	2,43,721	53,898	9,333	482	5,08,003
1900-01	1,49,173	48,059	1,70,218	83,866	2,96,904	1,41,217	43,416	681	9,78,913
1901-02 .. .	1,58,627	26,997	2,00,307	76,057	5,24,623	1,27,581	37,735	978	10,26,973
1902-03	1,57,614	47,743	1,97,206	84,373	3,32,984	1,36,654	49,847	1,027	10,44,599
1903-04	1,23,687	3 ,324	2,02,458	98,904	3,63,693	1,18,079	56,171	944	10,47,996
1904-05	1,61,221	28,561	2,04,400	68,992	3,62,354	1,25,929	48,907	977	10,46,660
1905-06 .. .	1,28,702	36,445	2,13,277	63,650	3,49,560	94,715	43,853	987	10,06,818
1906-07	1,52,687	34,286	2,13,950	73,135	3,08,046	1,73,765	40,134	969	10,58,722
Percentage of area under each crop on the total cropped area in 1906-07.	14·4	3·2	20·2	6·9	2·9	16·4	3·8	0·1	......

Land Revenue.

The land revenue of the tahsīl is more than half of the land revenue of the District. The revenue demand at the 30 years' settlement was Rs. 3,22,908 and absorbed 51 per cent. of the assets; at the last settlement this was raised to Rs. 5,33,710 (*kāmil-jamā*), the net realizable revenue being Rs. 4,94,330, giving an increase of 65 per cent. on the figures of the previous settlement, while the assets absorbed remained the same, *i.e.*, 51 per cent. In 1904-1905 the additional rates amounting to R. 9,833 and in 1905-1906 the patwāri cess amounting to Rs. 23,718 were abolished. The average rental incidence for the tahsīl per occupied area is R. 1-10-0 and the revenue incidence is R. 0-15-6 per acre. At the last settlement the tahsīl was divided into 20 assessment groups. The number of villages comprised in each are noted against each. Haveli group :—Mangelā (56), Northern Garhā (64), Pātan (36), Urnā (25), Pariat (26), Singaldīp (87), Panāgar (44), Shahpurā (55), Sadar (73); Kanthār groups :—Bherāghat (41), Nerbudda (30), Hiran (61), Katangī (36), Bhānrer (31); Bargī pargana :—Bargī East (112), Bargī West (121), Barelā (48); Kundam pargana :—Kundam (109), Baghrāji (87), Sundarpur (51). The rent-rate per occupied area is above Rs. 3 in the 5 groups of Haveli :—Pātan Rs. 3-12-6, Singaldīp Rs. 3-11-1, Northern Garhā Rs. 3-10-6, Mangelā Rs. 3-9-10, Shahpurā Rs. 3-6-5, and above Rs. 2 in the remaining 4 groups :—Urnā Rs. 2-15-10, Pariat Rs. 2-15-3, Sadar Rs. 2-7-9, Panāgar Rs. 2-7-4. In short the Haveli pays most of the revenue, *i.e.*, Rs. 3,31,912 or 62 per cent. of the total demand of the tahsīl and 32 per cent. of the total demand of

the District. The average rent-rate per acre of the 5 Kanthār groups comes to R. 1-12-1 and the revenue paid by Kanthār tract is Rs. 1,01,29¼. The average rent-rate of the Bargi pargana is R. 0-14-1 and the revenue paid is Rs. 88,411. The average rent-rate of Kundam circle is R. 0-9-9 and the revenue of the circle is only Rs. 23,740. The Government revenue of the tahsil is at present Rs. 5,97,810.

	Rs.	As.	P.
Land revenue	4,49,545	0	6
Cesses	27,023	14	11
Assessed taxes	14,667	6	7
Excise	1,02,131	0	0
Miscellaneous	4,442	6	11
	5,97,809	12	11

Miscellaneous.

The tahsīl is divided into 5 Revenue Inspectors' circles with headquarters at Panāgar, Pātan, Shahpurā, Bargī, and Kundam and 171 Patwāris' circles. There are 8 police stations besides the city police at Panāgar, Garhā, Pātan, Kundam, Belkherā, Shahpurā, Barelā and Bargi, and 15 post offices. Besides numerous schools in the city noted in the article on the city there are 38 primary schools for boys and 5 for girls (including 2 missionary schools). The following are the railway stations in the tahsīl: Shahpurā, Mīrganj, Madan Mahal, Jubbulpore on the Great Indian Peninsula Railway; Deori on the East Indian Railway; Howbāgh, Gwārighāt, Bargī and Sukri on the Sātpurā Bengal-Nāgpur Railway.

Jubbulpore City.—The headquarters of the Division, District and tahsīl of the same name is situated in 23° 10′ N. and 79° 57′ E., 616 miles from Bombay by the Great Indian Peninsula Railway and 784 miles from Calcutta by the East Indian Railway, the junction of the two lines being at the station. A branch narrow gauge railway has been recently opened to Gondia on the Bengal-Nāgpur Railway, 117 miles from Jubbulpore. The importance of the city is largely modern. In ancient times it was overshadowed by the capital of the Kalachuri dynasty of the Haihaya kings of Chedi at Tewar or Tripura, and by the Gond capital at Garhā, both close to Jubbulpore.

The city was first given prominence when the Marāthā Pandits of Saugor subjugated the Gond rulers of Garhā-Mandlā in 1781. They fixed the seat of their government there and built a small fort which has since disappeared. It stood on the part of the city now known as Lordganj, after Lord William Bentinck, who visited the Saugor and Nerbudda territories in 1838. About 1798 the Peshwā granted the District among other territory to Raghuji Bhonsla of Nāgpur, who held it till the British forces occupied it after the victory of Sitābaldi. During the misrule that ensued on the transfer of the District to the Bhonslas, it was harried by the Pindāris, and Amir Khān himself turned his followers loose to plunder the city. In 1818 Jubbulpore became the headquarters of the 'Commissioner on the Nerbudda' and soon after, of the Agent to the Governor General and Commissioner of the Saugor and Nerbudda territories. From this time its position as an important town was assured. The city is situated in a rocky basin surrounded by low granite hills, about 6 miles from the Nerbudda river. At Jubbulpore the soil is sandy (there are very fair golf links) and water is plentiful near the surface. It is 1306 feet above sea-level and is well laid out, with broad and regular streets and numerous tanks and gardens which have been constructed in the environs. The roads leading from the city are planted with fine trees, the Seonī road especially presenting a picturesque effect when the trees that line it are in leaf. The climate is comparatively good and Jubbulpore is generally considered the most desirable of the plain stations in the Central Provinces, of which it ranks as the second city. It is steadily increasing in importance, the population of the last four enumerations having been (1872) 55,188: (1881) 75,075: (1891) 84,481: (1901) 93,016, this last number including 63,997 Hindus, 21,036 Musalmāns, and 3,432 Christians, of whom 2,000 were Europeans and Eurasians. The climate is particularly suitable to Europeans and many take up their permanent residence in Jubbulpore on retirement from Government or other employment. The civil station and the city are both extending rapidly. To enlarge the civil station the village of Pachperi, east of the cantonment, has been lately acquired and converted into 16 building plots. The civil station and cantonment are divided from the city by a small

stream called the Omti Nāla. To the north-east of the city is situated the Central Gun Carriage Factory for India opened in 1905 with its separate settlements of European and native employés of whom there are about 2000. The Factory lies close under a rocky ridge on which block houses have been erected for its protection in an emergency. It is fully equipped with up-to-date machinery, a foundry and hydraulic presses, and is well worth a visit The wood used is chiefly teak, which is brought from Nepal, Burma and Malabar. Central Provinces *sāl* has been tried but has not been found satisfactory. East of the civil station and cantonment is a high ridge on which barracks for a European regiment (which will shortly be added to the garrison) have been constructed. The cantonment has a population of 13,157. The receipts and expenditure of the cantonment fund during the decade ending 1901 averaged about Rs. 26,000 and in 1906-07 they amounted to about Rs. 50,000. The garrison, which is included in the Mhow division, at present consists of one regiment of British and two of native infantry, one regiment of native cavalry, and a brigade of field artillery (three batteries with an ammunition column), the whole being under the command of a Brigadier General. A Government grass farm combined with a military dairy has also been established. Two companies of railway volunteers and one of the Nāgpur Volunteer Rifles are located here. Jubbulpore is an important commercial and industrial town, its commerce having received a great impetus through the development of the railway system. The imports and exports by rail in 1907-08 were valued at Rs. 78,00,000 as compared with Rs. 36,70,000 in 1875-76.

There are a number of factories, notably the Gokuldās Ballabhdās Weaving and Spinning Mills, which are yearly increasing their output. Two pottery works: Messrs. Burn & Co.'s and the 'Perfect Pottery' works, exploit the fine white clay found close to the city. There are also a brewery (Messrs. Mackinnon's & Co.), ice-factory, oil and flour mills and 4 hydraulic presses for *san* (hemp). A large trade in grain, hides, and agricultural and forest produce also passes through Jubbulpore and adds to its commercial wealth. At present wages are high, having

doubled within the last 10 years; a labourer can earn 5 or 6 annas a day while the more skilled workmen are able to obtain as much as a rupee, neither the outbreaks of plague which occurred in recent years—that of 1902-03 being especially severe,—nor the distress of 1908 due to partial crop failure, having checked the advance of prosperity. Established here are important branches of the Allahābād Bank and the great trading firm of Ralli Brothers. The local handicrafts are cloth weaving, brass-working, stone-cutting, and the manufacture of images from marble, and of studs, buttons and other ornaments from agate pebbles. Till lately a considerable tent-making industry was carried on, at first by the Thags, who were kept in confinement here, and their descendants, and afterwards at a school of industry: but this has ceased. There is a Reformatory school (formerly school of industry) to which juvenile offenders from the whole Province are sent to be reclaimed: there they are taught useful crafts. The city has six printing presses with English, Hindi and Urdū type, and an English weekly, the Jubbulpore Post, and a Hindi weekly, the Shubh Chintak, are published. Jubbulpore is the headquarters not only of the ordinary District staff, but of the Commissioner and Divisional Judge of the Jubbulpore Division, a Conservator of Forests, a Superintending and Irrigation Engineer, the Superintendent of Telegraphs for Central Provinces and an Inspector of Schools. One of the three Central jails and one of the two Lunatic Asylums in the Province are situated here. The jail industries include weaving of cloth for pillow and mattress cases, and of net money bags, the manufacture of wire-netting for local use and of thick bedding cloth and Scotch and Kidderminster carpets for sale. Tents were formerly made also, but this industry has ceased. In 1907 30 looms were employed in carpet making. The Church Missionary Society, Zenāna Mission, Roman Catholic, Wesleyan and American Methodist Churches have mission stations in Jubbulpore, and support several orphanages and schools. A Government Arts College affiliated to Allahābād University with law and engineering classes attached had 146 students in 1906-07. The law classes are now abolished. There are also 4 High schools with 2,3 pupils. Two are maintained by Christian Missions, one by a Musalmān society and one by a

Hindu society. There are also training institutions for male and female teachers and 53 other schools. Schools for European boys and girls are maintained by the Church Missionary Society and Roman Catholic Mission, with the aid of Government grants. The principal public buildings are the District court house situated near the city, the Government college, the Victoria Hospital, and the Victoria Memorial Town Hall, which was erected by the late Rājā Gokuldās, the millionaire banker of Jubbulpore, and his son Jiwandās and nephew Ballabhdās, to commemorate the Jubilee of the late Queen Empress and is held in trust by the Municipal Committee. Two other notable buildings are the Kastūrchand Hitkārni High School founded by Bholā Nāth Singhai, a wealthy citizen of Jubbulpore, in memory of his son Kastūrchand, and the Anjuman Islāmia High School, erected by subscriptions from the Musalmān community, with the aid of a grant from Government and in connection with the latter there is a fine hostel for boarders. In the centre of the city on the edge of the large tank of Hanumān, stands the imposing residence of the Gokuldās family, flanked by a number of handsome temples. The city and civil station form a municipality governed by a committee of 22 elected and 7 nominated members. The municipality is divided into 12 wards including the large village of Garhā now practically a suburb of Jubbulpore. The committee was originally constituted in 1864. For the decade ending 31st March 1908 the average yearly income was Rs. 2,01,275; for 1907-08 it was Rs. 2,63,545. For the last year the chief sources of revenue were octroi Rs. 1,50,619 (net); water-rate Rs. 43,431; conservancy tax Rs. 17,736; tolls Rs. 1760; rent from *nazūl* lands Rs. 9177; revenue from municipal property Rs. 11,127. The population of the municipal area was, according to the 1901 census, 77,169. Reckoned on this basis the incidence of taxation for 1907-08 was Rs. 2-13-4 per head, but this figure is rather higher than the real amount as the population has increased considerably. One of the principal assets is the fine system of water-works, which enable the municipality to supply good drinking water not only to the municipal area but also to the Cantonment and Gun Carriage Factory settlements. The reservoir is formed by a high masonry dam across

the Khandāri nāla about 7 miles from the city. It was, projected in 1872, but dropped for want of the necessary funds, amounting to 5 lakhs of rupees. In 1878, however, a water famine impressed on the inhabitants the need of a proper water-supply, and Rājā Gokuldās agreed to lend the necessary sum to the municipality on easy terms. The work was completed in 1883, and was formally opened on the 26th February in that year by Sir John Morris, the then Chief Commissioner.

The city, civil station and cantonment are policed by a force numbering about 330 of all ranks, including a special reserve of 75 men maintained at headquarters. The majority of the city police are stationed at the city Kotwāli, the rest being distributed throughout 12 posts, each having a small number of men. A band is kept up by the special reserve.

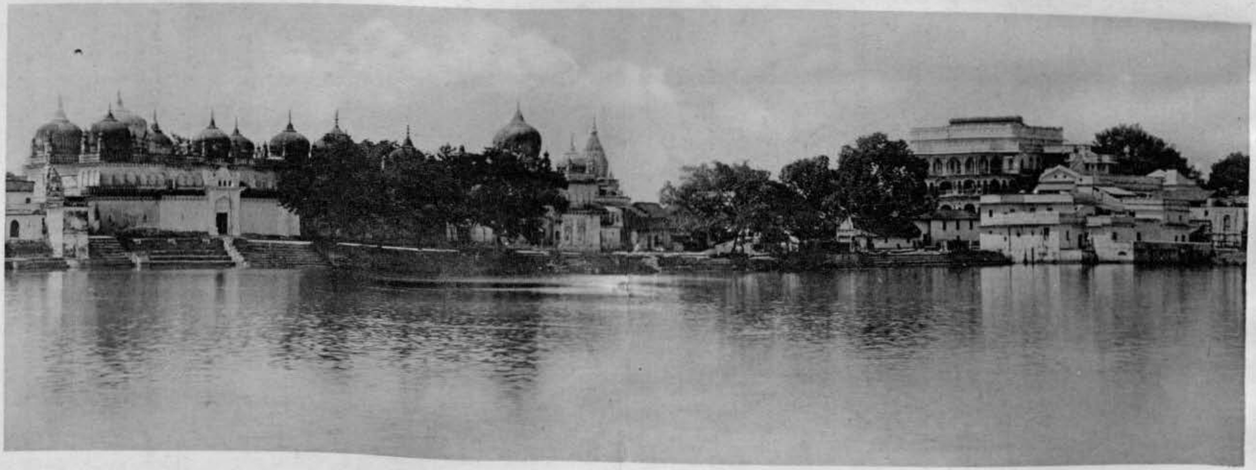
Kaimori.—A large village on the bank of the Hiran river quite close to the Bhānrer hills which overlook it from the opposite side of the river. Its population in 1901 was 1688 as against 1853 in 1891. The village was founded about the beginning of the 17th century by Rao Chūrāman, an Ahīr, who was the commander of a garrison posted at Katangī in the time of Rājā Narind Shāh (1679—1727 A.D.), the Gond Rājā of Garhā-Mandlā. For his military services Rao Chūrāman was given a āgīr of 22 villages round Kaimori and he settled his son Hamīr Deo at Kaimori and named the village after the neighbouring range of hills. The Marāthās confiscated the jāgir, but the British Government in consideration of the antiquity of the grant and the good services of the jāgīrdār in the mutiny of 1857 conferred a revenue free grant of 10 villages in perpetuity on the family to be held by the first born male member as an impartible and inalienable estate. The present jāgīrdār Rao Tek Singh is the 19th descendant from Rao Chūrāman. A large colony of Muhammadan cloth printers is settled here and the place is famous for its printed clothes. There are 9 temples on the bank of the Hiran river and two temples on the hillocks near the village called Kishangarh and Ganeshgarh. In the hills near the village on the other side of the river is the cave of Achalnāth which is said to be a hundred feet long. A weekly market is held on Fridays. The village has a primary school and a branch post office.

Kaimur Hills[1].—The eastern portion of the Vindhyan range of hills, commencing near Katangī in the Jubbulpore District of the Central Provinces (23° 26′ N. and 79° 48′ E.). It runs a little north of east for a disrance of over 300 miles to Sasarām in Bihār (24° 57′ N. and 84° 2′ E.).

The range after traversing the north of Jubbulpore District and the south-east of Maihar State turns to the east and runs through Rewah territory separating the valleys of the Son and Tons rivers and continues into the Mirzāpur District of the United Provinces and Shāhābād in Bengal. Its maximum width is 50 miles. In the Central Provinces the appearance of the Kaimur range is very distinctive. The rock-formation is metamorphic and the strata have been upheaved into an almost vertical position giving the range the appearance of a sharp knife-edged ridge. In places it almost disappears, being marked only by a low rocky chain and it never rises more than a few hundred feet above the plain in the Central Provinces. The Kaimurs enter Central India at Jukehi in Maihar State (23° 59′ N. and 80° 26′ E.) and run for 150 miles in a north-easterly direction forming the northern wall of the Son valley and overhanging the river in a long bold scarp of sandstone rock, from which near Govindgarh a branch turns off to the north-west. The range attains here an elevation of a little over 2000 feet. In Mirzāpur the height of the hills decreases in the centre to rise again to over 2000 feet at the rock of Bijaigarh with its ancientfort. Very interesting relics of prehistoric man have been found in the caves and rock-shelters of the hills here in the form of rude drawings and stone implements. In Shāhābād District the summit of the hills consists of a series of saucer-shaped valleys, each a few miles in diameter, containing a deposit of rich vegetable mould in the centre and producing the finest crops. The general height of the plateau is here 1500 feet above sea-level. The sides are precipitous, but there are several passes, some of which are practicable for beasts of burden. The ruined fort of Rohtās is situated on these hills. The rocks throughout consist principally of sandstones and shales.

Kanhwara.—A village in the Murwāra tahsil, 9 miles to the north of Murwāra on the Murwāra-Bijerāghogarh road.

[1] Reprinted from the draft article for the Imperial Gazetteer.



Bemrose, Collo., Derby.

TEMPLES AND PALACE ON HANUMAN TANK, JUBBULPORE.

1901, against 932 in 1891. It has a primary school for boys. A market is held on Thursdays. Rai Sāhib Debi Prasād Chaudhari of Jubbulpore is the proprietor.

Katangi.—A village picturesquely situated at the foot of the Bhānrer hills, 23 miles north-west of Jubbulpore city and 2 miles to the north of the Hiran river on the Damoh-Saugor road. The name of the village is derived from *katao* meaning the steep side of a hill. Its population in 1901 was 3330 against 3712 in 1891. It was once a military station of the Gond Rājās, and was famous for the manufacture of gun-barrels, which were largely exported. At that time also it was the principal centre of trade, whence the people from the hills purchased their commodities. Under the Marāthā Rājā the place had some strategical importance as the gate to the Kaimur pass, and it became a military centre and the headquarters of a Sūbahdārship. The masonry *ghāt*, a big tank in the centre of the village, a *dharmashāla* and a few temples remain to remind one of a popular Marāthā Sūbahdar, Beni Singh. In 1817, when the British took possession of the District, the place became the headquarters of a tahsil, which position it retained till 1856. It was also the headquarters of a police circle from 1856 to 1868. The village now contains a considerable Muhammadan community, chiefly dyers (Rangrez), cloth printers (Chhipas) and glassbangle makers, and they claim to be descendants of the Pathān soldiers of Asaf Khān, who conquered this tract in the battle of Singrāmpur. A brisk trade is done in basket making and glass bottle blowing for the supply of the Bāndakpur pilgrims. Small bottles for holding scent and glass-bangles are made by Kacherās of whom there are about 20 families, but the industry is not flourishing. There are 4 mosques in the village and a Jagannāth temple on the slope of the Bhānrer hills near the village. On the old site of the village further south along the bank of the Hiran river are the remains of two old temples. There is a primary school for boys, branch post office and an encamping ground. A small weekly market is held on Mondays. The mālguzārs are Rājputs not in flourishing circumstances.

Katni Railway Station.—A railway junction in the Murwāra tahsil, situated in 23°50′ N. and 80°24′ E. and

adjoining the town of Murwāra. The station for Murwāra is Katnī junction so called from the river Kathane now known as Katnī on which the town stands. Katnī is situated on the East Indian Railway, 678 miles from Bombay and 727 from Calcutta. It is connected with Bilāspur on the main line of the Bengal-Nāgpur system by a link of 198 miles and with Bīna on the Great Indian Peninsula Railway from Itārsi to Agra by one of 163 miles. These two connecting lines may eventually form part of the through route from Calcutta to Karāchi.

Katni River.—A river and tributary of the Mahānadi takes its rise near mauzā Jajnagrā in the Sihorā tahsīl about 9 miles to the west of Sleemanābād. It takes a northerly course and passing *via* Sleemanābād village leaves the Sihorā tahsīl near Khirehni. From thence taking a north-easterly course past Murwāra town it falls into the Mahānadi near Bhimpār, a village in the Bijerāghogarh pargana. The principal affluent of the Katnī is the Niwār which joins it near Gulwāra where it has a *Dahār* or fathomless pool. Here in olden days a huge iron pan used to appear on the surface. The people once tied it with ropes and began to draw it out, but it sank carrying the pullers with it down to the bottom and never appeared again. For some time a cow used to come out of the *Dahār* to graze, returning every evening to its home below. The Ahir with whose flock it used to graze once caught hold of her tail and descended into the pool where he saw a temple with Sādhus busy with their meditation. One of them asked him the cause of his coming to which he replied that he wanted wages for grazing the cow. The Sādhu thereupon gave him a handful of barley which he threw away considering it a paltry remuneration for his services. He caught the tail of the cow and came up again and began to repent of his folly when he discovered from a few grains which stuck to his blanket that the barley was of gold. He found no opportunity to go down again because the cow ceased coming out of the *Dahār* from that day. The Katnī has other small tributaries but none of any importance. Near Murwāra 8 flour mills are worked by the water power of the Katnī river. They were originally started for grinding Olpherts' paint, for which several of them are still utilised. A bridge, spanning the river at

Muṛwāra on the Mirzāpur road, is much admired for its light and lasting structure.

Katra Belkhera.—A large village situated on the left bank of the river Hiran, 7 miles to the north-west of Pātan. Its area is 1312 acres and the population in 1901 was 1790 as against 1768 in 1891. The village belongs to a family of Lodhis who are related to the jāgirdār of Piparia. This family also held a military service grant (jāgir) of 6 villages from the time of the Gond Rājās, and for their loyalty and good services to Government during the Mutiny they obtained another free grant from the British Government. A weekly bazar is held on Sundays. There is a small community of hand weavers here. The village has a primary school.

Kauria (from *kaudi*-shell, or *kaudia* snake.)—A fairly large village in the Sihorā tahsil, 15 miles north-west of Sihorā and 8 miles from the Sleemanābād Road station. The population in 1901 was 1275 persons against 1497 in 1891. There is a large tank in the village. A weekly bazar is held on Thursdays. Very good *sarotās* (nut-crackers) are manufactured here. The village has a primary school for boys and another school for girls. The proprietor is Rai Bahādur Bihārilāl Khazānchi of Jubbulpore, a Bhārgava Brāhman.

Ken River.—Takes its rise in the north of the District from a rice field situated in the jungly village of Mamar belonging to the Raj-Gond family of Hardwāra. The course of the Ken is short in this District and as such it is no more than a nullah in size. But after passing through the Pannā State and receiving the waters of several other streams the Ken is an important river when it reaches the border of the Damoh District at mauzā Orlā. At this place all the drainage of the Damoh District having collected in the Sonār meets the Ken which after traversing Bundelkhand and the District of Bānda finally falls into the Jumna at the Chillatarā ghāt. The story of the river's origin is similar to that of the Hiran. The rice field from which it rises was embanked several times by its owner, but his efforts were rendered useless by the water washing it away at one end where the force was greatest. Exasperated by his losses the cultivator thought that nothing short of a

human sacrifice would satisfy the water-god. Finding his son-in-law near by, he therefore put him in the breach and closed it up and lo ! the water stayed and the *band* became *pakkā*. The wife of the victim was a chaste woman. She anxiously waited for the return of her lord till late in the night, but when he did not come she went to her father to enquire of his whereabouts. The murderer having given unsatisfactory answers, her suspicions were aroused and she at once rushed to the field where her husband used to work daily and looking about she espied a bunch of hair projecting out of the mud on the embankment. Like a flash of lightning the thought struck her that it might be her husband's hair but there was no proof of it. So she addressed the water-god 'O thou of mighty power, if my husband has been sacrificed to thee, remove my anxiety by some sign of confirmation.' At the prayer of the chaste lady, to whose commands, according to popular belief, even the Supreme Being must respond, the water-god could not withhold a reply and confirmed the identity by raising a mysterious hand from its surface as if saying 'Aye.' The girl, whose name was Kinia, not being able to bear the grief of separation from her husband at once jumped into the collected waters exclaiming 'Take me also as thou hast taken my husband.' No sooner had she done this, than the waters rushed out with tremendous force breaking the *band* and washing her past the place where her husband had been sacrificed, thus uniting the couple in their death.[1] This stream became the river Kyān after the wife's name, and it is not till it enters the Bundelkhand country that its name is softened to the better known one of Ken. On its banks rose many a stately temple, numerous ruins of which may still be seen at Chhoti Deori, Semrā, Suror, Puraini, &c. The river is famous for the agates and other pebbles found in its bed

[1] Some say they were brother and sister. Being orphans the brother was caught and sacrificed and when the sister came to know of his fate she began to weep and shed tears which ran into a stream which the pent up waters of the field joined washing the buried brother and mingling him with the tears of his sister. There are two branches of the river near its source, one said to be formed by the tears of the sister still called Kinia as distinguished from the main channel which is known as Kyān.

at Bānda. One of its affluents the Aloni flowing within the District produces excellent water melons.

Khitoli.—A village on the Bhadār river in the Murwāra tahsīl, 30 miles south-east of Murwāra with which it is connected by a *katchā* road. It is 11 miles from Chandia station on the Katnī-Bilāspur line. About a mile to the south-east of the village the Government has recently constructed a dam across the Bhadār Nadi to hold up water for purposes of irrigation. Nearly 1200 acres of land are benefited by this work. Khitoli is a favourite resort of sportsmen, as all kinds of big game including tiger can be had in abundance in the neighbouring Government forest. In 1901 the population of the village was 1098 as against 1344 in 1891. A fairly large market is held on Thursdays. There is a primary school and post office in the village. The proprietors are Brāhmans.

Kumhi (Kumbhi).—A large village which gave its name to a pargana in the Sihorā tahsīl about 10 miles east by south of Sihorā and 12 miles south of Sleemanābād. It is situated on rising ground on the banks of the Hiran and contains several temples. A copper-plate grant was found here which gives the geneology of the Kalachuri kings of Tripuri and mentions that Gosaldevī gave a village named Chorlayi to a Brāhman in the year 1180 A.D. There is an annual fair known as Satdhāra or the seven channels of the Hiran river. It is held on Til-Sankrānt day and about 12,000 persons assemble. The village is held by Rai Bahādur Dādu Gulāb Singh, a rich Kāyasth of Seonī. The population of the village in 1901 was 591 as against 271 in 1891. The tenants are Brāhmans, Lodhīs and Chhīpas who are well-to-do. There is a primary school and a branch post office.

Kundam.—A village due east of Jubbulpore on the 29th mile of the Jubbulpore-Shāhpur road. Its population in 1901 was 764. It has a police Station-house, a primary school, a P. W. D. inspection-bungalow and a military encamping ground. A weekly market is held on Mondays. The mālguzār is a Rāj-Gond. Kundam according to one version derives its name from a big *kund* or tank[1] from which the river Hiran rises. This tank lies between the

[1] For the history of the tank, see article on Burhāgar.

inspection bungalow and the police station-house and there is a legend in connection with the rise of the Hiran river which has been related elsewhere.[1]

Mahanadi (Chhoti) River.—A stream of some importance rises from mauzā Umaria of the Niwār tāluk in the Rāmgarh pargana of the Mandlā District. It enters this District from the south-eastern corner at mauzā Rāmpurī in the Jubbulpore tahsīl and then pursuing a northerly course forms the natural boundary between the District and Rewah from mauzā Khirwan in the Jubbulpore tahsīl up to Vilāyat Khurd in the Murwāra tahsīl. It then takes a slightly north-western course and traversing the middle of pargana Bijerāghogarh leaves the District to pass into Rewah near Amākote. This is the only considerable stream which flows northwards, all the others running towards the west. Its important affluents within the District are the Katnī on the left bank and the Umrār coming from the Rewah territory on the right bank. There is a fine reach of the Mahānadi opposite the village of Itorā about a mile and a half in length up to Gandh Kāli where the depth of the water is found to be over 30 feet in April. The scenery here is very beautiful. Many other hill streams and nullahs find their way into the Mahānadi, but they are of little importance. The total length of the river is 161 miles.

Majhgawan.—(middle village). A large village in the Sihorā tahsīl 11 miles south-east of Sihorā and 9 miles from Sihorā road station with which it is connected by a *muram* road. There are several villages of this name in the Sihorā tahsīl and this village is therefore called Saroli-Majhgawān, Saroli being a neighbouring village separated from Majhgawān by a large tank called Sarman Sāgar constructed by Sarman Gadaria whose history has been given in the note on mauzā Burhāgar. The population in 1901 was 2,214 persons having decreased by 119 during the previous decade. There are large mango groves about the village. There is a small iron industry here. A weekly market is held on Thursdays. The village has a school, post office and a police station-house. The proprietors are Baniās.

Majholi.—(middle hamlet). A large village in the Sihorā tahsīl 12 miles north-west of Sihorā and 14 miles from Sihorā

---

[1] See under Hiran river.

road station with which it is connected by a *pakkā* road. It once possessed a famous temple of Vishnu of which nothing now remains but a large statue of Varāh or boar incarnation of Vishnu. The statue is almost hidden in the deep darkness of a modern temple which has been built out of the ruins of the old fane with numerous pieces of sculpture inserted in the wall. Close by is one of the ceiling slabs of the old temple with its deeply cut squares and circles of ornamental moulding. This has been turned into a *chakki* or mill stone for grinding lime. Nothing is known about the history of the temple—not even its name. Amongst the broken sculptures in the neighbourhood is a Hara Gauri or Siva and his wife seated with a standing figure of Siva and a squatted Jain statue naked as usual. The population in 1901 was 1791 persons against 2271 in 1891. There is a considerable weaving industry here ranking in the District next to that of Garhā but the industry suffered severely in the famines and many weavers have left the place. The village has a school, post office and police station house, also a P. W. D. inspection bungalow A large weekly market to which grain is brought from surrounding villages is held on Thursdays. A number of cattle are also brought for sale. The proprietors are Baniās who have purchased the village since the 1894 settlement.

Marble Rocks.—See Bherāghāt.

Murwara Tahsil.—The northern tahsīl of the Jubbulpore District lying between North Latitude 23°36′ and 24°8′ and East Longitude 79°58′ and 80°58′. It is bounded on the north by the Maihar and Pannā States, on the east by the Rewah State, on the south by the Rewah State and the Sihorā tahsil of the Jubbulpore District and on the west by the Pannā State. The tahsīl is for the most part hilly. It comprises an area of 1183 square miles or about 30.58 per cent. of the total area of the District. It is the smallest tahsīl in the District in respect of area and population. Murwāra, the head-quarters town of the tahsil, is of considerable importance. It is situated at the junction of the East Indian, Great Indian Peninsula and the Bengal-Nāgpur Railway and has an extensive trade in lime, metallic paints and grain The tahsil has only 3 small rivers of any importance, *viz.*, the Katni, the Mahānadi and the Umrār. The tract watered by the Mahā-

nadi consists of a portion of the Bijerāghogarh pargana which escheated to Government after the disturbances of 1857 A.D. This tract and that lying between the Kahenjua hills and the Katnī river and that between the Mahānadi and the Umrār and the southern portion of the Bilahrī circle are about the most fertile tracts in the tahsīl. Of fairly good black soil, and abounding in heavily embanked fields these tracts produce extensive *rabi* crops. In the tract along the Mahānadi and between this river and the Umrār juār is the principal food crop. The tahsil has two principal mountain ranges, the Kaimur and the Kahenjua, lying to the north-west and north respectively.

Population.

In 1901 the population of the tahsil was 161,673 or approximately 23·75 per cent. of the population of the District. The population in 1891 was 173,308, the decrease during the decade thus being 7·2 per cent. as compared with 12·5 per cent. in the Sihorā and 8·1 per cent. in the Jubbulpore tahsīls. The density of population in 1901 was 152 per square mile. Owing to the predominance of poor and inferior soils the density is much less than in the other tahsīls, Sihorā having 169 and Jubbulpore 237 persons per square mile. The tahsil has only one town, Murwāra with a population of 14,137. It contained in 1901 12 villages with a population of over 1000 persons, *viz.*—1 Bargaon, 2 Bilahrī, 3 Bijerāghogarh, 4 Baran Mohgawān, 5 Barhī, 6 Hadrehtā, 7 Kanhwāra, 8 Kāritalai, 9 Kuān, 10 Khitoli, 11 Piparia Kalān and 12 Singorī. There are 520 inhabited and 50 uninhabited villages in the tahsīl. There is only one ryotwāri village.

Agriculture.

The soils in this tahsil are inferior to those of the other two tahsīls of the District. The prevailing soil is *patarua*. At the last settlement about 12·6 per cent. only of the total area in cultivation was classed as black soil (*kābar* or *mund*), while 17 per cent. was *domattā*, 15 per cent. *sahrā*, 39 per cent. *patarua* and 16 per cent. *bhatua* or *ritua*. As to position about 9 per cent. of the cultivated area is classed as embanked, 4 per cent. as *tagar bandhia* and 7 per cent. as *jhilān* or *samān*, the rest being *tagar, tikurā or bharkila*. Excluding Government forest with an area of about 126 square miles, nearly 70 per cent. of the

available area was in occupation and 42 per cent. under cultivation in 1906-07. In the Piparia Kalān group the proportion of the area under crop is the highest in the tahsil, being 53 per cent. It is lowest in the Barwāra group, where it is 32 per cent. The proportion of the total occupied area is highest in the District in this tahsil, being 70 per cent. as compared with 64 per cent. in the Jubbulpore tahsīl and 55 per cent. in the Sihorā tahsīl. The cultivated area in 1906-07 was 417,430 acres as against 435,202 acres at settlement, and the gross cropped area 303,429 acres as against 287,279 of which 19,810 and 18,427 acres respectively were double cropped. The following statement shows the area under the principal crops at settlement and during the years 1900—1907 :—

Year.	Wheat.	Gram.	Linseed	Rice.	Kodon-kutki.	Sugar-cane.	Others.	Total cropped area (includes double cropped).
At last settlement	60,025	13,349	17,188	57,863	69,367	204	69,284	287,280
1900-01	23,961	20,789	19,100	33,882	77,101	108	100,166	295,107
1901-02	19,808	17,144	13,868	42,746	93,874	190	102,005	289,635
1902-03	28,971	28,908	18,276	42,293	88,297	187	123,741	330,673
1903-04	35,516	19,495	23,219	49,100	69,803	175	110,554	307,861
1904-05	30,082	19,718	20,914	45,771	90,410	208	87,588	302,691
1905-06	28,148	18,239	12,095	29,860	90,265	190	87,747	266,544
1906-07	33,107	23,430	15,688	46,793	88,658	205	95,548	303,429
Percentage of area under each crop on the total cropped area in 1906-07.	10·9	7·7	5	15·4	29	0·1	31·4	...

The decline in cropping since settlement is mainly under wheat and rice; the inferior crops, kodon, etc., are far more extensively grown here than in any other tahsil of the District. Cotton is grown over a nominal area of nearly 150 acres.

Land Revenue.

The revenue demand at the 30 years' settlement was Rs.92,228 and absorbed 54 per cent. of the assets. At the last settlement this was raised to Rs. 1,34,053 giving an increase of 45 per cent. on the figure of the previous settlement and absorbing 51 per cent. of the assets. In the year 1904-05 the additional rates were abolished. These amounted to Rs. 2,722. In 1905-06 the patwāri cess which amounted to Rs. 6,442 was also abolished. The Government demand at present (1907) is Rs. 1,28,138. The average rental incidence per occupied

acre was at last settlement R. 0-8-5 and the revenue incidence R. 0-4-11. At the last settlement the tahsil was divided into the following 9 assessment groups, the number of villages comprised in each are noted in brackets:—

1 Bijerāghogarh (38), 2 Kanhwāra (38), 3 Itorā (31), 4 Kānti (70), 5 Piparia Kalān (44), 6 Barhī (50), 7 Barwarā (59), 8 Murwāra (126), and 9 Bilahrī (114). The Kanhwāra group is the most highly assessed tract, the average rental incidence there being R. 0-13-8. Next to it come Bijerāghogarh R. 0-11-9, Piparia Kalān R. 0-11-0, Murwāra R. 0-8-4, Kānti R. 0-7-11, Itorā R. 0-7-5, Bilahri R. 0-7-3, Barwāra R. 0-6-10 and Barhī R. 0-6-8.

Miscellaneous.

The tahsil is divided into 4 Revenue Inspectors' circles with headquarters at Bilahrī, Barwāra, Bijerāghogarh and Barhī, and 109 patwaris' circles. There are 5 police Station-houses at Murwāra, Bhartalā, Barwāra, Barhī and Bijerāghogarh. There is only one municipality in the tahsīl, *viz.*, at Murwāra. There are 31 primary schools for boys and 5 schools for girls, besides the Anglo-Vernacular middle school at Murwāra. There are 13 cattle pounds, 9 post offices and one telegraph office.

Murwara Town.—(23°-50′ N. and 80°-24′ E.) The headquarters town of the Murwāra tahsīl. It is on the junction of the East Indian Railway, Bengal-Nāgpur Railway, and the Great Indian Peninsula Railway, 57 miles north-east of Jubbulpore. The East Indian Railway station which is to the east of the town and quite close to it is called Katnī after the name of the river on the right bank of which the town is situated. The Great Indian Peninsula Railway station which is to the south of the town is called Katnī-Murwāra. The town is rapidly growing in importance and is one of the leading goods station on the East Indian Railway. There is a large bazar with substantial and well-built shops in a circular form. A large trade is done in food grains, *ghī*, potatoes (from Kanhwāra), condiments, lac, lime, and slab stones. There are 16 limestone quarries, all of which have been declared to be mines under the Mines Act VIII of 1901. The rapid development of this industry may be gauged from the quantity of limestone raised during the quinquennial period 1901—05. The figures are :—*1901*, 28,000 tons; *1902*, 30,000 tons; *1903*, 35,000 tons; *1904*,

50,000 tons and *1905*, 92,000 tons. There are besides the limestone quarries as many lime kilns, several sandstone quarries, a fuller's earth quarry, mills worked by water power for the manufacture of Olpherts' metallic paint and eight small flour mills also worked by water power in or about the town. The flour mills are owned by natives and wheat is ground there for local consumption. The contract distillery of country liquor is at present also located here. Katnī lime is considered to be the best for white-washing and is much in demand all over India. Metallic paint works were opened here by Mr. W. G. Olpherts, late Engineer, East Indian Railway, in 1870. The paint is extensively used by almost all the Railway Companies and by the Public Works Department. An experimental furnace for cast-iron from the ore found in abundance in the vicinity was also started by Mr. Olpherts about 30 years ago, but it did not pay and had to be closed. An American syndicate has lately been considering the possibility of starting the manufacture of gramophone discs on a large scale within a few miles of Murwāra and a Bombay syndicate is about to start a porcelain factory, suitable raw materials having been found in close vicinity of the town. The educational institutions comprise an English middle school with 401 pupils in 1907-08, two primary (one Hindī and one Urdū) schools, an unaided Sanskrit school and two girls' schools, managed by the Church of England Zenāna Mission. There is also a police Station-house, a post and telegraph office and a dispensary with accommodation for 17 in-patients. There is a large dāk bungalow with 4 rooms quite close to the Katnī station. Behind the dâk bungalow is a municipal *sarai*. There are also two private *dharmashālas*. The population in 1901 was 14,137 against 7,510 in 1891. Murwāra was created a municipality in 1874 and the average municipal receipts for the decade ending 1901 were Rs. 9109. There is no octroi here. The bulk of the income is derived from the *haisiyat*-tax, rents of stalls in bazars and the weighmen's fees. The total receipts in 1906-07 amounted to Rs. 13,147 and the total expenditure to Rs. 11,923. The expenditure is mainly on conservancy and the upkeep of the municipal school and dispensary. The water-supply is obtained from Katnī river and from a number of wells. There is no *nazūl*

land. The proprietors of Murwāra used to be a rich Brāhman family and the name of the town is said to be derived from *mūnd* (head) to commemorate the fact that on this site an ancestor of the family lost his head in battle. This family owned 28 villages, now all lost. Murwāra has only recently passed into the hands of a Pārsi and a Baniā.

Nanhwara Kalan.—A village in the Murwāra tahsil about 19 miles north-east of Murwāra and nearly 3 miles west of Bijorāghogarh and 8 miles from Jukehi station. Numerous remains of old buildings of carved stones are to be found and it is believed that a very large ancient city lies buried here. In 1901 the population of the village was 943 against 1045 in 1891. There is a primary school for boys in the village and the proprietor is Mannulāl Masurhā of Murwāra, a Baniā.

Nerbudda River[1].—(*Narbadā*; *Narmadā*—The *Namados* of Ptolemy; *Namnadios* of the Periplus).—One of the most important rivers in India. It rises on the summit of the plateau of Amarkantak (29° 40′ N. and 81° 46′ E.), at the north-eastern apex of the Sātpurā range in Rewah (Central India), and enters the sea below Broach in the Bombay Presidency, after a total course of 801 miles.

Course of the River.

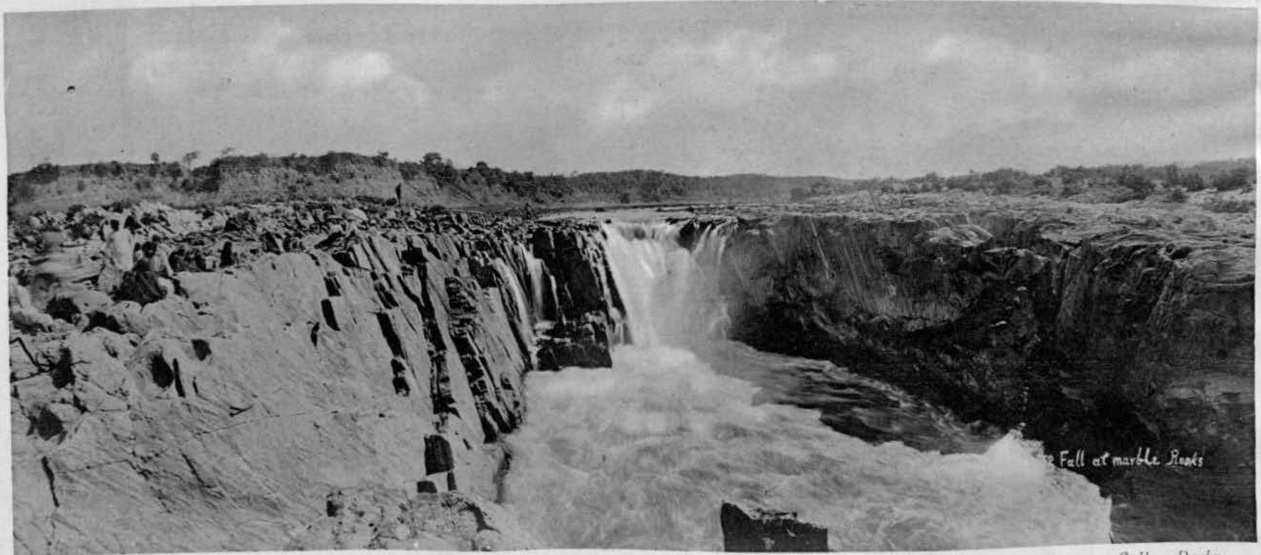
The river rises in a small tank, 3500 feet above the sea surrounded by a group of temples, and guarded by an isolated colony of priests, and falls over a basaltic cliff in a descent of 80 feet. After a course of about 40 miles through the State of Rewah it enters the Central Provinces and winds circuitously through the rugged hills of Mandlā, pursuing a westerly course until it flows under the walls of the ruined palace of Rāmnagar. From Rāmnagar to Mandlā town it forms, for some 15 miles, a deep reach of blue water, unbroken by rocks, and clothed on either bank by forest. The river then turns north in a narrow loop towards Jubbulpore, close to which town, after a fall of some 30 feet, called the *dhuān-dhāra* or 'fall of mist', it flows for two miles in a narrow channel which it has carved out for itself through rocks of marble and basalt, its width being here only some 20 yards. Emerging from this channel, which is well known as the 'Marble Rocks,' and flowing west, it enters the fertile basin of alluvial land

[1] The article on the Nerbudda river is a reprint from the draft article for the Imperial Gazetteer.

forming the Nerbudda valley, situated between the Vindhyan and Sātpurā hills, and extending for 200 miles from Jubbulpore to Handia with a width of about 20 miles to the south of the river. The Vindhyan hills rise almost sheer from the northern bank along most of the valley, the bed of the river at this part of its course being the boundary between the Central Provinces and Central India (principally the Bhopāl and Indore States). Here the Nerbudda passes Hoshangābād and the old Muhammadan towns of Handia and Nimāwar. The banks of the river in this valley are about 40 feet high, and the fall in its course between Jubbulpore and Hoshangābād is 340 feet. Below Handia the hills again approach the river on both sides and are clothed with dense forests, the favourite haunts of the Pindāris and less famous robbers. At Mandhār, 25 miles below Handia, there is a fall of 40 feet, and another of the same height at Punāsa. The bed of the river in its whole length within the Central Provinces is one sheet of basalt seldom exceeding 150 yards in absolute width, and, at intervals of every few miles, upheaved into ridges which cross it diagonally and behind which deep pools are formed. Emerging from the hills beyond Māndhāta on the borders of the Central Provinces, the Nerbudda now enters a second open alluvial basin, flowing through Central India (principally Indore State) for nearly 100 miles. The hills are here well away from the river, the Sātpurās being 40 miles to the south and the Vindhyas about 16 miles to the north. In this part of its course, the river passes the town of Mandleshwar, the old capital of the Holkar family where its northern bank is studded with temples, palaces and bathing *ghāts*, many of them built by the famous Ahalyā Bai, whose mausoleum is there. The last 170 miles of the river's course are in the Bombay Presidency, where it first separates the State of Barodā and Rājpipla and then meanders through the fertile District of Broach. Below Broach city it gradually widens into an estuary whose shores are 17 miles apart as it joins the Gulf of Cambay.

Drainage area, tributaries, etc

The drainage area of the Nerbudda, estimated at about 36,000 square miles, is principally to the south, and comprises the northern portion of the Sātpurā plateau



Bemrose, Collo., Derby.

FALLS OF THE NERBUDDA AT THE MARBLE ROCKS.

and the valley Districts. The principal tributaries are the Banjar in Mandlā, the Sher and Shakkar in Narsinghpur, the Tawā and Ganjāl in Hoshangābād and the Chhotā Tawā in Nimār. The only important tributary to the north is the Hiran, which flows in beneath the Vindhyan hills, in Jubbulpore District. Most of these rivers have a short and precipitous course from the hills, and fill with extraordinary rapidity in the rains producing similarly rapid floods in the Nerbudda itself. Owing to this and to its rocky course, the Nerbudda is useless for navigation except by country boats between August and February, save in the last part of its course where it is navigable by vessels of 70 tons burden up to the city of Broach, 30 miles from its mouth. It is crossed by railway bridges below Jubbulpore, at Hoshangābād and at Mortakkā. The influence of tides reaches to a point 55 miles from the sea, and, coupled with the height of the river's banks throughout the greater part of its course, makes it useless for irrigation.

Sacred character of the river.

The Nerbudda, which is referred to as the Rewā (probably from the Sanskrit root *rev*, to hop, owing to the leaping of the stream down its rocky bed) in the Mahābhārat and Rāmāyan, is said to have sprung from the body of Siva and is one of the most sacred rivers of India, local devotees placing it above the Ganges, on the ground that whereas it is necessary to bathe in the Ganges for forgiveness of sins this object is attained by mere contemplation of the Nerbudda. 'As wood is cut by a saw (says a Hindu proverb), so at the sight of the holy Nerbudda do a man's sins fall away.' Gangā herself, so local legend avers, must dip in the Nerbudda once a year. She comes in the form of a coal-black cow, but returns home quite white free from all sin. The Ganges, moreover, was (according to the Revā Purāna) to have lost its purifying virtues in the year 1895, though this fact has not yet impaired its reputation for sanctity. At numerous places on the course of the Nerbudda and especially at spots where it is joined by another river, are groups of temples, tended by Nāramdeo Brāhmans, the special priests of the river, where annual gatherings of pilgrims take place. The most celebrated of these are Bherāghāt, Barmhān, and Onkār Māndhāta in the Central Provinces, and Barwāni in

Central India where the Nerbudda is joined by the Kapilā. All of these are connected by legends with saints and heroes of Hindu mythology, and the description of the whole course of the Nerbudda, and of all these places and their history, is contained in a sacred poem of 14,000 verses (the Narmadā Khanda) which, however, has been adjudged to be of somewhat recent origin. Every year 300 or more pilgrims start to perform the *pradakshinā* of the Nerbudda, that is, to walk from its mouth at Broach to its source at Amarkantak on one side, and back on the other, a performance of the highest religious efficacy. The most sacred spots on the lower course of the river are Sukaltīrth, where stands an old banyan tree that bears the name of the saint Kabīr and the site of the Rājā Bali's horse sacrifice near Broach.

Historical associations.

The Nerbudda is commonly considered to form the boundary between Hindustān and the Deccan, the reckoning of the Hindu year differing on either side of it. The Marāthās spoke of it as 'The River,' and considered that when they crossed it they entered a foreign country. In the Mutiny the Nerbudda practically marked the limit of the insurrection. North of it the British temporarily lost control of the country, while to the south, in spite of isolated disturbances, their authority was maintained. Hence, when in 1858 Tantia Topī executed his daring raid across the river, the utmost apprehension was excited, as it was feared that on the appearance of the representative of the Peshwā, the recently annexed Nāgpur territories would rise in revolt. These fears, however, proved to be unfounded and the country remained tranquil.

Padwar (fallow).—A large village 7 miles to the north-east of Barelā. Its population in 1901 was 930 as against 912 in 1891. A fair weather track which is passable by country carts runs here from Barelā, and a weekly bazar is held on Thursdays. The village has a primary school, a Government girls' school and a District Council cattle pound. The settlement is a very ancient one and is the residence of a Brāhman family who are *muāfidārs* (revenue-free grant holders) of 14 villages. The Marāthā Rājās gave this free grant in the 17th century to the ancestors of the present holders and the British Government continued the grant on a

quit-rent of half the assessed revenue. It is said that the Marāthā Rājās gave the grant to the original grantee for having successfully pursued and caught alive a deer in an open competition race on horseback. Most of the *muāfi* villages have been sold and the *muāfis* have since been resumed. The present *ubāridārs* hold the *muāfi* in small shares. They are indebted and some of their shares have been sold. Clay of a reddish colour is found in the village which the people use for cleaning their hair in place of soap.

Panagar (Corrupted from Pāngarh betel fort).—A village 9½ miles north of Jubbulpore on the Mirzāpur road and one mile from Deori railway station on the East Indian Railway. In 1901 its population was 4082 as against 4437 in 1891 and it contained 1209 houses. It is noted for its *pān* (betel-leaves) gardens several of which extend along the bank of a large tank on the outskirts of the village known as the Balehā tank. A small irrigation tank was constructed by famine labour in 1900. It is a place of some antiquity and among the relics found are a big black stone *chabūtra* in the bazar known as 'Hardaul Lāla' or 'Kher Māta' and a large statue of a boar in black stone. A big weekly bazar is held every Saturday and forms the occasion for the largest cattle market in the District. The Village Sanitation Act is in force. Indirect taxation in the form of voluntary cattle registration and weighmen's fee is levied and the annual receipts from these sources amount to about Rs. 3600, which is spent on surface cleaning, road improvements and the improvement of the water-supply. Iron was the principal article of trade 50 years ago when the indigenous iron smelted at Sonpur, Baghrāji and other adjacent places was in great demand. Now the principal trade is in grain, forest produce, and cattle. Brass cups and dishes and ornaments for the hands and feet are also made. The Church of England Zenāna Mission has a male and female hospital, a Christian orphanage and a girls' school here. A police Station-house, a vernacular middle school with a roll of 205 pupils, a primary school, and a branch post office constitute the public buildings. There is also a military encamping ground. The village is owned by a Bengāli pleader and a Baniā of Jubbulpore city.

Pariat River.—The principal affluent of the Hiran river, takes its origin in mauzā Mahoni near Kundam in the

south-east corner of the District. Its course is due west and flowing past Sonpur it crosses the railway line and the Mirzāpur road about 4 miles south of Deori Panāgar station. From thence taking a northerly course it falls into the Hiran river about 4 miles south of Singaldīp. Its whole course is in the Jubbulpore tahsīl. It is a much smaller river than either the Hiran or Nerbudda and its course is not marked to the same extent by deep ravines and wide margins of sandy and stony land. The slopes are gentle and the floods when they do occur have not sufficient strength or volume to score and scour the country as do those of the larger rivers. The Pariat is not suited for irrigation. In its course two nullahs of considerable magnitude meet, *viz.*, the Omti which after nearly encircling Jubbulpore town flows northward, and the Ultana which rises amongst the hills to the east of Jubbulpore and takes its course in the north running very nearly parallel to the Pariat until it meets the Omti whence they both together fall into the Pariat between Padwār and Belkhirwā. The Mangarīha is another affluent but it is an insignificant one. The total length of the Pariat is about 46 miles.

Patan.—(from *pattana*, a town) is a village situated about 20 miles to the north-west of Jubbulpore on the Tendūkherā road. It consists of 794 occupied houses and had in 1901 a population of 3399 as against 3479 in 1891. It gave its name to a pargana, which is the richest, most thickly populated and most fertile wheat tract of the District and is known as the 'Haveli.' It was the headquarters of a tahsil till 1863. It has a Government dispensary with a hospital assistant attached to it and with quarters for indoor patients. The other public buildings are a vernacular middle school, a Government girls' school, a police station-house, a branch post office and a P.W.D. inspection bungalow. A weekly bazar is held on Wednesdays and cattle are brought for sale chiefly from Damoh District, but the principal trade is in grain. The Village Sanitation Act is in force. The income is derived from voluntary cattle registration fees, bazar dues, and weighmen's fees and amounts to about Rs. 800 a year. The expenditure is mostly devoted to the improvement of roads and water-supply. The mālguzār of the village is a Brāhman.

Piparia Kalan (Village with pīpal trees).—This is the largest village in the northern Kanthār tract on the bank of the Hiran. It contained 487 inhabited houses and a population of 2012 in 1901, as against 2531 in 1891. Its area is 3598 acres. It is held in jāgīr (military service grant) by a Lodhi family. People of all classes and professions reside here. A large weekly bazar is held on Thursdays and the trade in grain is brisk. A colony of Mehrās is settled here who carry on a hand weaving industry. The village has a primary school.

Rithi.—A small village near the head of the Ken river about 20 miles to the north-west of Murwāra and a railway station on the Bīna-Katnī section of the Indian Midland Railway. The population in 1901 was 541 against 559 in 1891. To the east of the village is a long heap of cut and carved stones, the remains of some ten or twelve temples. Numerous fragments of sculptures are scattered about. The group of temples near the large tank is called *Barāh deo kā sthān* and there is an old statue of the Varāha incarnation of Vishnu with a *Nāg* underneath. The village has a primary school and a post office. A weekly market is held on Sundays. The village is owned by Musammāt Sundar Thakurain, a Gond, and is held on lease by Rikhi Rām Naik.

Rupnath.—About 3 miles from Bahurīband and about 19 miles from the Sihorā railway station, is the name of a famous *linga* of Siva which is placed in the cleft of a rock where the Bandarchua nāla pours over the face of the Kaimur range of hills. Mr. Cousens remarks that the general appearance of the country around would hardly prepare one to find such a wild forsaken nook, a perfect chaos of rocks and pools, overshadowed by rugged precipices 50 to 60 feet high, in whose clefts and caverns wild beasts find a quiet refuge. The three pools, which from time immemorial seem to have been an attraction for pilgrims, are 3 huge basins in the rocks, one above the other, embraced within the encircling crags, and down which water leaps in the rains from ledge to ledge in a beautiful cascade. The uppermost pool is named Rām kund, the middle Lakshman kund and the lower one Sita kund. An annual fair is held on the Til-Sankrānt day in the month of January. But what invests

this place with the greatest importance is the rock edict of the Emperor Asoka. The detached boulder on which it is inscribed lies just above the west margin of the lower pool. This inscription was engraved about 232 B. C. Its substance has been referred to in the History chapter. It is the oldest inscription and the only one of its kind found in the Central Provinces. Asoka was not likely to cause his edicts to be engraved where no one would see them, so we may well suppose that Rupnāth must have been a sacred *tīrtha* and gathering place far away back in the third century before Christ. People still believe that a person whose ashes are put in one of the pools will go to Heaven. Accordingly those who cannot carry the ashes to the Ganges or Nerbudda throw them in the Rupnāth *kunds*.

Salaiya.—A village 30 miles to the north-west of Sihorā and the headquarters of the chief of the Salaiyā tāluk. This chief is a Lodhī by caste and bears the hereditary title of Rājā. The present holder is Rājā Ajīt Singh. He holds 33 villages on an *ubāri* tenure of Rs. 1,600 per annum. Many villages are also owned by him on mālguzāri tenure. The population of the village was 368 in 1901 and the area 2508 acres. Salaiyā railway station on the Indian Midland Railway in the Murwāra tahsīl is named after this village and is about 3 miles from it. At the 30 years' settlement Salaiyā contained the only fort then in the District in anything like habitable condition and it still continues in a fair state of preservation. It is however of modern construction and therefore not of much consequence.

Satpura Hills[1]—The southern portion of the Jubbulpore District runs into the foot-hills of the Sātpurā range. The name Sātpurā, which is modern, originally belonged only to the hills which divide the Nerbudda and Tāpti valleys in Nimār, and which were styled the *sāt putrā* or seven sons of the Vindhyan mountains. Another derivation is from *sāt purā* (seven folds), referring to the numerous parallel ridges of the range. The term Sātpurā is now, however, customarily applied to the whole range, which, commencing at Amarkantak in Rewah, Central India (22°

Geographical position.

[1] This article is abridged from the draft article for the Imperial Gazetteer.

40′ N., 81° 46′ E.), runs south of the Nerbudda river nearly down to the western coast. The Sātpurās are sometimes, but incorrectly, included under the Vindhya range. Taking Amarkantak as the eastern boundary, the Sātpurās extend from east to west for about 600 miles, and in their greatest depth exceed 100 miles from north to south. The shape of the range is almost triangular. From Amarkantak an outer ridge runs south-west for about 100 miles to the Sāletekri hills in the Bālāghāt District, thus forming as it were the head of the range, which shrinking as it proceeds westward from a broad tableland to two parallel ridges ends, so far as the Central Provinces are concerned, at the famous hill fortress of Asīrgarh. Beyond this point the Rājpipla hills, which separate the valley of the Nerbudda from that of the Tāpti, complete the chain as far as the Western Ghāts. On the tableland comprised between the northern and southern faces of the range are situated the Districts of Mandlā, part of Bālāghāt, Seoni, Chhindwāra and Betūl.

Geological formation.

The superficial stratum covering the main Sātpurā range is trappean, but in parts of all the Districts of the Central Provinces which it traverses, crystalline rocks are uppermost, and over the Pachmarhi hills the sandstone is also uncovered. In Mandlā the higher peaks are capped with laterite. On the north and south the approaches to the Sātpurās are marked as far west as Turanmāl by low lines of foot-hills. These are succeeded by the steep slopes leading up to the summit of the plateau, traversed in all directions by narrow deep ravines hollowed out by the action of the streams and rivers, and covered throughout their extent with forest.

Heights.

The highest peaks are contained in the northern range, rising abruptly from the valley of the Nerbudda and generally sloping down to the plateau, but towards the west the southern range has the greater elevation. Another noticeable feature is a number of small tablelands lying among the hills at a greater height than the bulk of the plateau. Of these Pachmarhi (3530 feet) and Chikaldā in Berār (3664 feet) have been formed into hill stations, while Raigarh (2200 feet) in the Bālāghāt District and Khāmla in Betūl (3700 feet) are

famous grazing and breeding grounds for cattle. Dhūpgarh (4454 feet) is the highest point on the range, and there are a few others of over 4000 feet. Among the peaks that rise from 3000 to 3800 feet above sea-level, the grandest is Turanmāl (Bombay Presidency), a long, rather narrow tableland 3300 feet above the sea and about 16 square miles in area. West of this, the mountainous land presents a wall-like appearance both towards the Nerbudda on the north and the Tāpti on the south. On the eastern side the Tāsdin Vali (Central India) commands a magnificent view of the surrounding country. The general height of the plateau is about 2000 feet.

Shahpura.—(Emperor's town). A large village in the southern Kanthār tract about 18 miles south-west of Jubbulpore, situated on the Bombay Road with a station on the Great Indian Peninsula Railway. The *abādi* is within the limits of 3 villages, Khairi, Kaithra, and Shahpurā and consists of 576 inhabited houses and a population of 1946 according to the census of 1901. A large weekly bazar is held on Mondays and a considerable trade in grain is done. The village has a primary school, a police Station-house, a P.W.D. inspection hut, a military encamping ground and a post office. The mālguzārs are Rājputs.

Sihora Tahsil.—The central tahsil of the Jubbulpore District lying between North Latitude 23°15′ and 23°50′ and East Longitude 79°55′ and 80°45′. It is bounded on the north by the Murwāra tahsil, on the east by the Rewah State, on the south by the Jubbulpore tahsil and on the west by the Damoh District. The central tract of the tahsil comprised in the Sihorā, Gosalpur, Majhgawān, Lamkanā and a portion of the Umaria assessment groups is the most fertile tract of the tahsīl. It resembles the Jubbulpore tahsil Haveli which it adjoins except that while the Jubbulpore Haveli is an entirely flat and open plain, the Sihorā Haveli is interspersed with hills and jungles. It is however a fairly open tract with good wheat cultivation and black cotton soil. It is traversed by the East Indian Railway and is watered by the Hiran which is the main stream of the tahsil. The western portion of the tahsīl adjoining the Damoh District and comprised in the Majholi, Bachaiya, Bahuriband and Kauria assessment groups is greatly inferior to

the central portion. The culturable lands are uneven and cut up by forests, the soil is mostly of the *mund* and *sahrā* classes and the principal produce is rice, particularly in the Bahurīband group ; wheat is however grown in the Bachaiya and Kauria groups. The eastern portion adjoining the Rewah State is very hilly ; the soils are poor, kodon and kutkī being the principal crops and the cultivators are mainly Gonds. The Hiran and the Katnī rivers are the chief water channels. The Katnī rises from the Bhitrīgarh hills and flows west by Sleemanābād, then north by Bilahrī and Murwāra and falls into the Mahānadi. The principal ranges of hills are Kaimur, Bhitrīgarh, and Bijnā. The total area of the tahsīl excluding Government forest which covers about 88 square miles is 704,673 acres or 1101 square miles.

Population.

The population in 1901 was 186,424 persons and in 1891, 212,949 persons. At the census of 1891 the increase during the preceding decade was found to be 10·5 per cent. During the decade 1891 to 1901 the population decreased by 12·5 per cent. as compared with the decrease of 7·2 per cent. in the Murwāra tahsīl and 8·1 per cent. in the Jubbulpore tahsīl. The density of the population in 1901 was 169 persons per square mile as compared with 237 in the Jubbulpore tahsīl and 152 in the Murwāra tahsīl. There is only one town in the tahsīl, *viz.*, Sihorā, with a population of 5595. There are 17 villages in the tahsīl with a population of over 1000 persons according to the census of 1901, *viz.*, Bachaiya, Bākal, Bahurīband, Darshanī, Dasarman, Dharampurā, Gosalpur, Indrāna, Kauria, Kuhkā alias Sleemanābād, Majhgawān, Majholi, Murwāri, Ramkhiria, Silondi, Sihundi and Umaria. The tahsīl contains 719 inhabited and 78 uninhabited mālguzāri villages, and 2 ryotwāri villages.

Agriculture.

Though not so good as in the Jubbulpore tahsīl the soils here are still superior to those found in the Murwāra tahsīl. At the last settlement nearly 43 per cent. of the total area in cultivation was classed as *kābar* or *mund*, 13 per cent. as *domattā*, 15 per cent. as *sahrā* and 29 per cent. as *patarua*, *bhatua* and *ritua*. As to position nearly 33 per cent. of the area in cultivation is classed as embanked,

6 per cent. as *tagar bandhia*, 6 per cent. as *jhilān* or *samān* and the rest 55 per cent. is *tagar*, *tikra*, *bharkīla*, &c. Of the total area of the tahsil excluding the Government forest about 55 per cent. was occupied and 51 per cent. cultivated in 1906-07. In the Majholi group 94 per cent. of the occupied area was under crop at settlement, in the Umaria group 90 per cent., in the Lamkana, Gosalpur, Indrāna and Bachaiya groups 89 per cent., in the Sihorā group 84 per cent., in the Bahurīband and Paharua groups 80 per cent., and in the Kauria group 60 per cent. The last mentioned group comprises all the jungly villages in the north of the tahsīl and east of the railway line. In 1906-07 the total area in cultivation was 363,409 acres against 368,235 at settlement and the gross cropped area was 307,335 against 309,453. Of this 41,248 and 35,949 were double-cropped in 1906-07 and at settlement respectively. Though there has been a decline in the area under crops the double-cropped area has increased since settlement. The following statement shows the areas under the principal crops at settlement; and during the years 1900-01—1906-07 :—

Year.	Wheat.	Gram.	Linseed.	Sugar-cane.	Rice.	Kodon.	Others.	Total.
At last settlement	157,173	12,100	16,792	546	75,826	41,951	41,011	345,399
1900-01	119,911	24,851	22,793	312	64,315	45,275	45,515	322,952
1901-02	127,436	16,441	15,229	510	70,845	50,127	52,867	333,455
1902-03	136 518	18,549	20,757	549	68,428	54,556	52,893	352,220
1903-04	148,253	11,362	21,941	500	53,870	59,836	51,666	347,408
1904-05	141.751	15,373	14,351	494	71,768	53,652	41,538	338,927
1905-06	118,383	13,347	21,131	502	54,412	60,496	56,667	324,938
1906-07	145,468	10,462	21,113	459	62,696	62,186	45,981	348,365
Percentage of area under each crop on the total cropped area in 1906-07.	41·8	3	6·1	·1	18	17·8	13·2	100

The decline in cropping since settlement is mainly under wheat, gram and rice. Linseed and kodon are far more extensively grown while sugarcane cultivation is decreasing.

Land Revenue.

The revenue demand at the 30 years' settlement was Rs. 1,91,678 and absorbed 61 per cent. of the assets. At the last settlement this was raised to Rs. 3,33,296 *kāmiljamā*, the net realizable revenue being Rs. 3,14,912.

giving an increase of 72 per cent. on the figures of the previous settlement; while the assets absorbed remained the same, *viz.*, 51 per cent. In 1904-05 the additional rates amounting to Rs. 6,197 and in 1905-06 the patwāri cess amounting to Rs. 14,552 was abolished. The Government demand of the tahsil at present is Rs. 3,04,719. The average rental incidence per occupied acre is R. 1-8-10 and revenue incidence R. 0-14-6. At the last settlement the tahsīl was divided into the following 10 assessment groups. The number of villages comprised in each are noted in brackets:—Lamkanā (39), Gosalpur (65), Sihorā (75), Majhgawān (72), Indrāna (87), Bachaiyā (66), Bahurīband (93), Kauria (109), Paharua (88), and Umaria (113). The rent-rate is highest in the Lamkanā group at Rs. 3-4-4 per acre and lowest in the Kauria group where it is R. 0-9-0 per acre. The Lamkānā group is the most highly assessed tract in the tahsīl, the revenue incidence there being R. 1-14-6. Next to it come Majhgawān R. 1-7-6, Gosalpur R. 1-5-3, Bachaiyā R. 1-3-9, Indrāna R. 1-1-1, Umaria R. 1-0-11, Sihorā R. 1-0-7, Paharua R. 0-6-11, Bahurīband R. 0-6-10 and Kauria R. 0-5-5.

Miscellaneous.

The tahsīl is divided into 4 Revenue Inspector's circles with headquarters at Majholi, Bahuriband, Umaria and Majhgawān and 123 patwāri's circles. There are 5 police Station-houses at Sihorā, Majholi, Bahurīband, Dhīmarkherā, Majhgawān and Sleemanābād. There is only one municipality in the tahsīl, *viz.*, at Sihorā. There are 45 primary schools for boys and 4 schools for girls. There are 15 post offices and one telegraph office.

Sihora Town.—(23° 29 N. and 80° 6 E.) The headquarters town of the Sihorā tahsīl. It is two miles from the Sihorā road station on the E. I. R. line, 26 miles north-east of Jubbulpore. Some say that the town derives its name from a fortress which once existed on a small eminence in the north and was known as Singhorgarh. That portion of the town is still called Garhiapurā and the land around it comprising a number of fields is known as Singhori. But Mr. Hira Lāl thinks that it has the same derivation as Sihore which is a corruption of Sivapur or the town of Siva. Under the native rule he town was always the head-

quarters of a *sūbah*. The population in 1901 was 5595 persons, having decreased by 203 during the previous decade. Hindus form the bulk of the populationn, numbering 4903, while there are 545 Muhammadans. Sihorā was created a municipality in 1867 and the average municipal receipts for the decade ending 1901 were Rs. 5130. The net income of the municipality in 1906-07 was Rs. 5668 and its expenditure Rs. 5012. The main sources of income are the *haisiyat* tax and the weighmen's license fees and the expenditure is mainly on conservancy and the upkeep of the municipal vernacular middle school and dispensary. The water-supply is obtained from two tanks and from a number of wells. Sihorā is approximately the largest rice-exporting station in the District. Wheat, oilseeds and lac are also exported to some extent. A weekly market is held on Mondays. Steel called *kheri* is made from iron ore found locally by burning it in native kilns like iron. This steel is used to make the edges of axes, *hansias*, knives and carpenters' tools. It is a soft steel and cannot be used for cutting stone. A scheme for working it by a company was abandoned owing to the lack of fuel for burning. There are no other industries and the residents are mostly agriculturists. There are a number of petty traders who deal in grain and piece-goods. Khitolā bazar, which is close to the Sihorā road station and which is within municipal limits, is the residence of a number of large traders who deal in grain and lac. Grain is brought here from the interior and is exported to Bombay. The educational institutions comprise a vernacular middle school, a Sanskrit school, started from subscriptions under the management of a committee presided over by Pandit Vishnu Datt Shukul, B.A., an Honorary Magistrate and a leading Rais and mālguzār in the tahsīl, and a girls' school opened by the Church of England Zenāna Mission. There is a dispensary, a branch post office, a combined post and telegraph office, and a police Station-house. The town has a dâk bungalow and a Local Board *sarai* for native travellers. The municipality comprises Sihorā town and a part of mauzā Khitolā called Khitolā bazar. The area of *nazūl* or Government land is 82·59 acres. Formerly the village belonged to a resident Saraongi Baniā who in 1888 sold it for Rs. 10,000 to the Anjuman Islāmia of Jubbulpore.

Silondi.—A fairly large village in the Sihorā tahsil, 26 miles south-east of Sihorā and 24 miles from Sihorā road station. This is an important trading centre. All jungle produce, grain and *ghī* from the Dindori tahsil of the Mandlā District and the Kundam pargana of the Jubbulpore District are brought here for sale. The chief traders are the Kalārs who are generally well-to-do. The population in 1901 was 1943 persons against 2166 in 1891. A weekly market is held on Wednesdays and a considerable trade is done in grain, hemp, *ghī*, lac, *harrā* and other forest produce. The village has a primary school for boys and a post office. The proprietor is a Kalār who obtained the village by purchase.

Simra.—A village on the right bank of the Ken or Kyān river near the northern end of the Sati Pahār about 10 miles from the Katnī-Murwāra station. Its population was 344 in 1901. To the east of the village there are the ruins of four temples, one large and three small. Some of the stones contain figures of incarnations of Vishnu such as the boar and the dwarf. On the embankment of the Barāti Tāl there are the ruins of a fifth temple, and in the middle of the village there is a *chabūtra* where very finely carved images which apparently belonged to these temples are placed. In this collection the most notable statues are those of Brahmā who is no longer worshipped owing to the Puranic story that he attempted to commit adultery with his daughter. The presence of this statue which belongs to the 10th century A. D. seems to indicate that no such story prevailed at that time and that he had similar devotees as the other two gods of the triad, *viz*, Vishnu and Siva, whose statues may also be seen on the same platform. There is also the goddess Durgā with ten hands and two lions for her conveyance. In one of the newly made temples a stone containing an inscription from old ruins has been used. It mentions the name of Karnadeva, the Kalachuri king, who flourished in the 11th century. On the bank of the tank there is also a monument which records that Kamaldevi, wife of Rao Daulat Singh, committed Sati in 1298 A.D. The proprietor of the village is a Kalār.

Sleemanabad (or Kuhkā).—A village in the Sihorā tahsil, 15 miles north-east of Sihorā and 3 miles from Sleemanābād

station with which it is connected by a metalled road. The population in 1901 was 1270 against 1658 in 1891. Col. Sleeman founded this village about 1832 A.D. It was the headquarters of a tahsīl until about 1868 A.D. When the Bijerāghogarh pargana was confiscated and the tahsīl was removed from there to Murwāra, the headquarters of the Sleemanābād tahsīl were also removed to Sihorā. The village stands on the Katnī river and has an ample water-supply. There is a considerable trade in gram, lac, *harrā* and grass. A weekly market is held every Friday. There are copper mines situated on an exceedingly flat plane of land lying between two ridges of low hills and about one and a half mile south-west of Sleemanābād railway station. A concession has been taken and experiments have been made, but the working of the mines has not yet begun. The village has a primary school for boys, a primary school for girls, a post office and a police station house. The site of the village measuring 96 acres is Government property. One half of the village is held by Rai Bahādur Bihārilāl Khazānchi of Jubbulpore, and the proprietors of the other half are Brāhmans.

Sonpur (golden town).—A pretty village in the Jubbulpore tahsīl, 9 miles east by north of Jubbulpore on the Baghrāji road and picturesquely situated on the high banks of the Pariat, an affluent of the Hiran river. The village is built on the outskirts of thick jungle amply stocked with game ; on the opposite side of the river is Lakhanwāra, a small village belonging to a Baniā of Jubbulpore. The population of Sonpur is 385. The mālguzār is a Kalār. The place is an ancient one and at the time of the Gond Rājās was of some importance as a military station ; the Marāthās also kept a body of cavalry here.

Tewar.[1]—A village on the Marble Rocks road, 8 miles to the west of Jubbulpore, and close to Garhā. Its population was 1356 in 1901 as against 995 in 1891. Tewar with four other villages was granted free to a Marāthā Brāhman of Nāgpur by the Bhonsla Rājās and in 1823 the British Government confirmed the grant to the original grantee as a reward for his loyalty. The present holder is Shankar Rao of Nāgpur. The village possesses a primary school with

[1] See history chapter regarding its historical importance.

a post office and a weekly market is held on Sundays A number of Larhias are settled here, who use the sandstone and marble in the manufacture of images, grindstones, agate studs, cups, basements of pots, holding jars for almirahs (*kundis*) and the like. The old name of Tewar was Tripur or Tripuri, the memory of which is still kept up by the name of a Siva *linga* enshrined in the village and called Tripureshwar or the lord of Tripur. The antiquity of Tripuri may be gathered from the fact that coins bearing its name have been found stamped in characters belonging to the 3rd century B.C. Its name occurs in an inscription of the Parivrājak Mahārājas belonging to the 5th century. In mediæval times it was the capital of the Kalachuri kings of Dāhal, and at that time it extended to the banks of the Nerbudda and included Gopālpur which is now a separate village about 3 miles from Tewar. In the 11th century Karnadeva made an extension to the south-west and ornamented it with beautiful temples and buildings. He changed the name of the town to Karnāvati after his own and the site where now not one building or carved stone remains is still known as Karanbel, a name with double signification, retaining the memory of the founder in the first half and giving the distinguishing mark of the site in the second half, there being a jungle of *bel* trees on the raised ground where once stood a fort named Hathiāgarh surrounded on one side by a ditch and on another by the rivulet Bāwangangā which falls into the Nerbudda at Bherāghāt. The ruins of this place have been used in the construction of *ghāts*, temples, houses, railway bridges and culverts so that little of any interest now remains. At the west end of the village of Tewar under a large tree are collected together a great number of sculptures all more or less broken but many of them otherwise in very good preservation and most exceptionally well carved. Here while digging for the foundations of a hut for Devi, the people found signs of masonry work, which on being cleared up turned out to be a big step well embanked with stones and it now supplies water to the village. There is also a big tank named Bal Sagar in the middle of which a modern temple has been constructed with old materials. In the niches some interesting images are placed, one of which belonging to the Jain religion has a

Tirthankara on the top and a female figure with a child in her arms, below which there is an inscription saying 'Soma wife of Mānaditya daily bows' in characters belonging to the 12th century. Several inscriptions[1] of Kalachuri kings were found in Tewar but they have been all removed from the place.

Tigwan (Tigowa).—A small village with a population of 176 persons, situated 2 miles to the north of Bahuriband and 13 miles west of Sleemanābād. This village is believed to be identical with Jhanjhangarh where Alhā and Udal fought against the Rājā of Mārogarh. Here can be seen a low rectangular mound about 250 feet long by 120 feet broad which is entirely covered with large blocks of cut stone. Only one temple is now standing, that of Kankāli Devī. It is one of the most ancient monuments in the Central Provinces and of about the same age as the ruins at Eran in the Saugor District. One peculiarity about it is that Gangā and Yamunā who are represented on either side of the doorway are near to the top as in the Ajantā caves. This marks a very early style. Later these *devis* climbed down and stood beside the door at the bottom of the jambs and later still they disappeared altogether. The temple in plan and general arrangement is strikingly like the small Buddhist temple at Sānchi. The two are exactly the same size. The likeness is so great that it leaves little doubt of its being a genuine Buddhist temple subsequently converted into a Hindu shrine. General Cunningham thinks the temple cannot be later than the fifth centu y A.D. but it is more probably as old as the third century. Besides this there are ruins of over 30 temples which were utterly destroyed by a railway contractor. The proprietor is a Kāyasth.

Tilwara (from *til* sesamum).—This is a small village on the bank of the Nerbudda, 6 miles to the south-west of Jubbulpore, situated on the old Nāgpur road. Its population in 1901 was 77. The Nerbudda at this point has a very wide sandy bed and here on Til Sankrānt day in January every year is held a large fair lasting from 3 to 5 days and attended by about 40,000 persons. The primary object of the visitors is to bathe in the sacred stream, but a certain amount of trade is also done, a number of shops for the sale

[1] See under Archæology, para. 52.



Bemrose, Collo., Derby.

FIGURE OF THE GANGES ON A CROCODILE, TIGWAN.

of provisions and metal goods being set up. Near the village in the hills of Rāmnagar lie valuable quarries of slate-stone. On the *ghāt* is an old temple of Mahādeo known as *Tilwundeshwar* deity's temple. A 2nd class P. W. D. *muram* road runs from the town of Garhā to this *ghāt*. The village belongs to the mālguzār of Garhā, a Brāhman.

Umaria.—The largest village in the Sihorā tahsīl, 12 miles north east of Sihorā and 9 miles from Sleemanābād station with which it is connected by a *muram* road. The population in 1901 was 2646 having increased by 162 during the previous decade. The inhabitants are mostly Barais who grow *pān* extensively and are well-to-do. *Pān* leaves are exported to many places in the Central Provinces and the United Provinces. A weekly market is held on Sundays, a large business being done in grain, wood and bamboos which are brought from the neighbouring villages. The village possesses some ancient remains of exquisitely sculptured temples. One gateway is surmounted with a figure of Lakshmī with two elephants, one on each side, pouring water over her and another with a figure of Garuda, the conveyance of Vishnu. These figures are rarely found at the top of the entrance and in the Central Provinces they are not known to exist elsewhere. Umaria has a boys' school, a girls' school, a post office and a police station-house. The proprietor is a Barai.

Vindhya Hills.[1] (Ouindion of Ptolemy).—The two principal ranges of hills in the Jubbulpore District—the Bhānrer and Kaimur – form part of the Vindhyan system, a series of hills separating the Gangetic basin from the Deccan, and forming a well-marked chain across the centre of India. The name was formerly used in an indefinite manner to include the Satpurā hills south of the Nerbudda, but is now restricted to the ranges north of that river. The Vindhyas are not a range of hills in the proper geological sense of the term, that is, possessing a definite axis of elevation or lying along an anticlinal or synclinal ridge. The Vindhyan range to the north of the Nerbudda, and its eastern continuation, the Kaimur to the north of the Son valley, are merely the southern scarps of the plateau

Geographical extent and position.

[1] Reprinted from the draft article for the Imperial Gazetteer.

comprising the country known as Mālwā and Bundelkhand. The range has been formed by subærial denudation and is a dividing line left undenuded between different drainage are s. From a geographical point of view the Vindhyan range may be regarded as extending from Jobat (22° 27′ N. and 74° 35′ E.) in Gujarāt on the west to Sasseram (24° 57′ N. and 84° 2′ E.) in the south-western corner of Bihār on the east, with a total length of nearly 700 miles. Throughout the whole length of the range as thus defined it constitutes the southern escarpment of a plateau. The Rājmahāl hills extending from Sasseram to Rājmahāl and forming the northern escarpment of the Hazāribāgh highlands, cannot be correctly considered as a part of the Vindhyan range.

Geographical features.

The range commencing in Gujarāt crosses the Central India Agency from Jhābua State in the west, and defines the southern boundary of the Saugor and Damoh Districts of the Central Provinces. From here the Kaimur branch of the range begins and runs through Baghelkhand or Rewah into Bihār. The Kaimur hills rise like a wall to the north of the Son valley, and north of them a succession of short parallel ridges and deep ravines extends for about 50 miles. At Amarkantak the range touches the Sātpurā hills at the source of the Nerbudda. Westward from the Jubbulpore District the Vindhyan range forms the northern boundary of the valley of that river. Its appearance here is very distinctive, presenting an almost uninterrupted series of headlands with projecting promontories and receding bays like a weather-beaten coast line. In places the Nerbudda washes the base of the rocks for miles, while elsewhere they recede and are seen from the river only as a far-off outline with the plains of Bhopāl or Indore spread out below them. The rocks are sandstone of a pinkish colour and lie in horizontal slabs which commonly testify to their origin by curious ripple marks plainly formed by the lapping of water on a sandy shore. To the north of this escarpment lies the Bundelkhand or Mālwā plateau with a length of about 250 miles and a width at its broadest part of about 225. The plateau is undulating and is traversed by small ranges of hills, all of which are considered to belong to the Vindhyan system.



Bemrose, Collo., Derby.

FIGURE OF THE JUMNA ON A TORTOISE, TIGWAN.

Outlying ranges.

The most northerly of these minor ranges, called the Bindhyāchal, cuts across the Jhānsi, Bānda, Allahābād and Mirzāpur Districts of the United Provinces, nowhere rising above 2,000 feet. The range presents the appearance of a series of plateaux, each sloping gently upward from south to north, and ending abruptly in the steep scarp which is characteristic of these hills. Many outlying isolated hills are found in these Districts standing out on the plains beyond the furthest scarp. One small hill, called Pabhosā, stands on the left bank of the Jumna, the only rock found in the Doāb. The Bhānrer or Pannā hills form the south-eastern face of the Vindhyan escarpment and bound the south of the Saugor and Damoh Districts and the north of the Maihar State in continuation of the Kaimur, thus being a part of the main range. They run from north-west to south-east for about 120 miles. Their highest peak is that of Kalumār, which has an elevation of 2544 feet. Two other branches of the range lie in Malwā, starting respectively near Bhilsā and Jhābua with a northerly direction and bounding the plateau to the east and west.

Elevation and drainage.

The general elevation of the Vindhyan range is from 1500 to 2000 feet, and it contains a few peaks above 3000, none of which are of any special importance. The range forms with the Sātpurās the watershed of the centre of India, and among others the Chambal, Betwā, Sonār, Dhasāṇ and Ken rivers have their sources in these hills. The Son and Nerbudda rise at Amarkantak, where the Vindhyan and Sātpurā ranges join. The rivers generally rise near the southern escarpment and flow north and north-east.

Geological formation.

Geologically the range is formed principally of great massive sandstones of varying consistency, alternating with softer flag, and shales, the whole formation covering an area 'not greatly inferior to that of England' (Mallet). The range has given its name to the Vindhyan system of Indian geological nomenclature. Over a great part of the Mālwā plateau the sandstone is covered by the overflowing Deccan trap, while from Ganurgarh fort in Bhopāl to near Jobat the range itself is of basaltic formation, and the last six y miles to the

west from Jobat to near Jambughorā consist of hills of metamorphic rocks. Economically the Vindhyan rocks are of considerable value, the sandstone being an excellent building material which has been extensively used for centuries; the Buddhist topes of Sānchi and Barhut, the eleventh century temples of Khajurahā, the fifteenth century palaces of Gwalior, and numerous large forts at all important positions on the plateau having been constructed of this material. At Nāgode and other places limestone is found in some quantity, the pretty corraline variety extracted from the Bāgh cretaceous beds having been extensively employed in the palaces and tombs at Māndu; and at Pannā in the conglomerate which underlies the shales, diamonds are met with, though none of any great value have been extracted. Manganese, iron and asbestos are also found in various parts of the range. The lofty flat-topped hills and bold scarps which are such a marked feature of this range were early recognised as ideal sites for fortresses, and besides the historical strongholds of Gwalior, Narwar, Chanderī, Māndu, Ajaigarh and Bāndogarh, the hills are studded with the ruined castles of marauding Girasia and Bundelā Chiefs.

Forests.

The hills are generally covered with a stunted forest growth of the species found in the dry forests of Central India. Teak only occurs in patches and of small size, and the forests are generally noticeable for their poverty of valuable timbers.

Mythological associations.

The term 'Vindhyā' in Sanskrit signifies 'a hunter' and the range occupies a considerable place in the mythology of India, as the great demarcating line between the Madhyadesha or 'middle-land' of the Sanskrit invaders, and the non-Aryan Deccan. The Vindhyas are personified in Sanskrit literature, where they appear as a jealous monarch, the rival of king Himālaya, who called upon the sun to revolve round his throne as he did round the peak Meru. When the sun refused, the mountain began to rear its head to obstruct that luminary, and to tower above Himālaya and Meru. The gods invoked the aid of Agastya, the spiritual guide of Vindhya. This sage called upon the Vindhya mountain to bow down before him, and afford him an easy passage to and from the south. It obeyed, and Agastya

passed over But he never returned, and so the mountain remains in its humbled condition far inferior to the Himālaya, to the present day. Another legend is that when Lakshman, the brother of Rāma, was wounded in Ceylon by the King of the Demons, he wished for the leaves of a plant which grew in the Himālayas to apply them to his wound. Hanumān, the monkey-god, was sent to get it, and not knowing which plant it was, he took up a part of the Himālayas and carried them to Ceylon. He happened to drop a portion of his load on the way, and from this the Vindhyan hills were formed.
